Atomic Energy Control Board
P.O. Box 1046
Ottawa, Canada
K1P 5S9

Commission de contrôle de l'énergie atomique
C.P. 1046
Ottawa, Canada
K1P 5S9

INFO-0289

STANDARDS FOR COLLECTION OF IDENTIFYING INFORMATION FOR HEALTH RECORD KEEPING

by

M. Carpenter, M.E. Fair
P. Lalonde and T. Scott
Statistics Canada

A research report prepared for the
Atomic Energy Control Board
Ottawa, Canada

September 1988

Canada

Research report

89-05139/

STANDARDS FOR COLLECTION OF IDENTIFYING INFORMATION FOR HEALTH RECORD KEEPING

A report prepared by Maureen Carpenter, Martha E. Fair, Pierre Lalonde and Tannys Scott, Occupational and Environmental Health Research Unit, Vital Statistics and Disease Registries Section, Health Division, Statistics Canada, under contract to the Atomic Energy Control Board.

ABSTRACT

A new recommended guideline for the standard data collection of individual identifying information has been developed and tested by Statistics Canada. The purpose of developing a standard method is to improve health record keeping in Canada: in particular for long term medical follow-up studies of individuals exposed to potentially hazardous agents for detection of possible health risks or delayed harm, e.g. individuals exposed to radiation through occupations, the environment, emergencies, or therapeutic practice. A data collection standard is also useful for epidemiological follow-up studies for other occupation groups such as chemical workers and miners, or for lifestyle, genetic and other studies.

The need for a better standard and improved comparability of health record keeping has been highlighted recently by various health organizations and national and international bodies. The absence of a sufficient number of identifiers makes it difficult and costly, or in many cases impossible, to carry out long term follow-up studies necessary for the detection of health risks.

Statistics Canada, Health Division, Occupational and Environmental Health Research Unit (OEHRU), from their experience with long term health studies using the Canadian Mortality Data Base*, has prepared a "Data Collection Package" to include the developed and tested data collection guideline. It is anticipated this will help produce more thorough and comparable on-going record keeping while saving costs and time for many organizations e.g. Atomic Energy Control Board licensees who report radiation doses to the National Dose Registry, as well as for other companies and organizations across the country where long term medical follow-up studies are anticipated now or in the future. It may also allow for broader industrial, national and international comparisons.

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* The national death file containing all deaths in Canada with cause of death from 1950.

The guideline consists of a two page Individual Identity Summary (IIS): the first page for completion by the individual/employee to give unique identifying information; the second page for the study organizer/employer to include essential additional information (work history etc.). A third optional page can be used by organizations wishing to collect data on children. The Data Collection Package also includes brief explanatory notes, a suggested file record layout and detailed computer coding advice for entering the data into a computer file. A computer file will allow for ease of maintenance and extraction for long term follow-up studies.

DISCLAIMER

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RÉSUMÉ

Une nouvelle ligne directrice proposée pour la collecte normalisée d'éléments d'identification individuels a été élaborée et mise à l'essai par Statistique Canada. L'établissement d'une méthode normalisée visait à améliorer la tenue des dossiers médicaux au Canada; en particulier pour le suivi médical à long terme des personnes exposées à des agents potentiellement dangereux en vue du dépistage des risques pour la santé ou des effets nuisibles à retardement (p. ex., pour les personnes exposées à des rayonnements dans leur travail, dans l'environnement, dans des situations d'urgence ou par mesure thérapeutique). Une norme pour la collecte des données est aussi utile pour le suivi épidémiologique d'autres groupes professionnels comme les personnes travaillant avec des produits chimiques et les mineurs, ou encore pour des études génétiques, sur les habitudes de vie ou d'autres types.

Divers organismes nationaux et internationaux et différentes organisations de santé ont souligné récement qu'il fallait disposer d'une meilleur norme pour la tenue des dossiers médicaux et qu'il fallait que ceux-ci soient davantage comparables. L'absence d'un nombre suffisant de données d'identification fait en sorte qu'il est difficile et coûteux, ou dans de nombreux cas impossible, d'assurer le suivi à long terme nécessaire au dépistage des risques en matière de santé.

La Sous-section de l'hygiène du travail et du milieu de la Division de la santé de Statistique Canada s'est servi de l'expérience accumulée par son personnel dans le domaine des études sur la santé à long terme à l'aide de la Base de données de la mortalité canadienne* pour préparer une "trousse de collecte de données" qui incluera la ligne directrice sur la collecte des données qui a été élaborée et mise à l'essai. On prévoit que cette trousse aidera à produire de façon permanente des dossiers médicaux plus complets et comparables. De plus, elle permettra d'épargner du temps et de l'argent à de nombreux organismes comme la Commission de contrôle de l'énergie atomique (les détenteurs d'un permis de cette commission doivent signaler les doses de rayonnement au Fichier dosimétrique national) et à d'autres sociétés et organisations de tout le pays qui réalisent actuellement ou prévoient réaliser plus tard des études comportant un suivi médical à long terme.

* Le fichier national des décès contient des donneés sur tous les décès survenus au Canada depuis 1950 et sur leur causes.

Elle pourrait aussi permettre d'établir de plus vastes comparaisons dans le domaine industriel ou à l'échelle nationale ou internationale.

Cette ligne directrice comprend un sommaire de l'identité individuelle de deux pages. Sur la première, la personne ou l'employé doit fournir des données d'identification uniques. La seconde est réservée aux responsables de l'étude ou à l'employeur qui pourra y consigner d'autres renseignements essentiels (expérience de travail, etc.). Une troisième page optionnelle pourra servir aux organisations désireuses de rassembler des données sur les enfants. La trousse de collecte de données comprend aussi de courtes notes explicatives, le cliché d'enregistrement proposé et des conseils détaillés sur le codage informatique en vue de l'introduction des données dans un fichier informatique. Le recours à ce type de fichier facilitera la tenue à jour et l'extraction des données nécessaires aux études de suivi à long terme.

PREFACE

The funding was for the development and evaluation of a standard health record keeping methodology for employees of AECB licensees. It would facilitate long-term follow-up of licencees' employees exposed to radiological and non-radiological hazardous agents for detection of possible health risks or delayed harm.

The purpose of developing a standard record keeping method is to make all licencee files compatible. Data analysis among the various files should then not only be cheaper and more thorough, but also more comparable. The standard should also facilitate periodical epidemiological studies, for example, as study populations age. It may also allow the study of synergisms among radiation and chemical agents or among radiation and other factors (medical history, lifestyle, geographic location, etc.). It should also form the basis for unambiguous identification of the individual in conjunction with radiological and non-radiological exposure histories and work histories. This will allow for subsequent follow-up of health outcomes (mortality, morbidity and genetic effects) and will be of use for reporting purposes to registries (dose, exposure, or disease), and for other legislative or regulatory requirements.

The report provides details of the development of an Individual Identity Summary (IIS) within a comprehensive Data Collection Package. This Data Collection Package is intended as a handbook and reference source for use by AECB licencees and also for other industrial companies or organizations in Canada who wish to set up or improve health record keeping. It is hoped that with use and feedback the usefulness of the Data Collection Package will continue to improve.

Format:

The report provides details in the following format:

Introduction:

Why the questionnaire form and Data Collection Package was developed

Methodology:

How it was developed and evaluated.

Results:

What the Data Collection Package contains.

Promotion/Marketing

How information on the form and Package will be promoted and disseminated.

More specific details on the last 3 items are included in Appendices A, B,C and E.

Appendix D contains the Data Collection Package itself.

Separate copies of the Data Collection Package can be obtained by writing to:

Statistics Canada
Health Division
Vital Statistics and Disease Registries Section
R.H. Coats Bldg., 18th Floor
Tunney's Pasture
Ottawa, Ontario, K1A OT6

or telephoning (613) 951-1734 Martha Fair
(613) 951-1760 Maureen Carpenter

STANDARDS FOR COLLECTION OF IDENTIFYING INFORMATION FOR HEALTH RECORD KEEPING

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"The time of busy people is sometimes wasted by time-consuming questionnaires dealing with inconsequential topics, worded so as to lead to worthless replies, and circulated by untrained and inexperienced individuals, lacking in facilities for summarizing and disseminating any worthwhile information which they may obtain."

John K. Norton
National Education
Association Research Bulletin, 1930
Vol. 8, No.1

"Lack of adequate recorded information and of organization and use of historical data in a consistent fashion are two major stumbling blocks in long-term epidemiological or genetic research."

World Health Organization (WHO),1985
Guidelines for the Study of
Genetic Effects in Human Populations

STANDARDS FOR COLLECTION OF IDENTIFYING INFORMATION FOR HEALTH RECORD KEEPING

A. INTRODUCTION

1. BACKGROUND

In carrying out epidemiological studies it is often found that historical files lack appropriate documentation. A major problem is that inadequate identifying information is being maintained for current and past employees, making it either difficult and costly, or impossible to carry out long term follow-up studies for detection of any health risks. [Inadequate identifiers also increase the error of failure to make an appropriate link (false negative) because of the paucity of identifying information.]

In Canada several agencies have had to spend a large proportion of the expenditure for an epidemiological study on data collection to create nominal roll files for past and current employees (e.g. Eldorado Nuclear). Various health organizations within the United States, Canada and internationally have expressed views similar to the World Health Organization (WHO) which has recently emphasized the importance and necessity of capturing adequate personal identification in retrievable form for future health monitoring of genetic as well as occupational and environmental effects [Ref. 17].

Better collection of identifying information would allow follow-up and file linkage to determine health outcomes (i.e. mortality, morbidity and genetic effects). In addition, this would help:

(1) facilitate and encourage companies/agencies in hazardous environments to keep better unambiguous individual identifying records on an ongoing basis, e.g. for employees of Atomic Energy Board licencees;

(2) in compiling employee nominal rolls, e.g. for long-term mortality studies;

(3) with keeping and compiling records of total work and exposure histories;

(4) facilitate follow-up after any emergency incident or accident e.g. Chalk River Clean-up, Three Mile Island, Chernobyl, Montreal PCB storage fire;

(5) for reporting purposes to registries (exposure and disease), and for legislative or other regulatory requirements e.g. agencies/ companies that report exposure data to the National Dose Register, or hazardous exposure data to the Ministries of Labour or Workers Compensation Boards;

(6) in developing international protocol for genetic data;

(7) in forms revision and developing standard outcome data (e.g. vital statistics and cancer registry data);

(8) for combining and comparative studies such as those forming part of national or international collaborative studies e.g. radiation studies such as Eldorado Nuclear, Ontario miners, and also nickel workers;

(9) in the design of new survey questionnaires where long-term follow-up may be required e.g. nutritional or fitness surveys;

(10) for reviews of studies by international bodies e.g. ICRP, BEIR Committees.

2. OBJECTIVES

To develop a recommended guideline for the standard collection of individual identifying information for occupational and environmental health record keeping in Canada. This would allow for more efficient and effective long-term follow-up of individuals exposed to potentially hazardous agents for detection of possible health risks or delayed harm.

B. METHODOLOGY - Phase I

1. Literature Review

A literature review of recent data collection recommendations was carried out in the area of occupational and environmental health within Canada, the U.S. and the U.K. [Ref. 1-8]. These reports gave general information on items presently being collected and highlighted problem areas, mainly that insufficient or incomplete identifying information has been a major problem in carrying out long term medical follow-up

studies in the past.

2. Review of Current Experiences and Practices

A review by telephone, correspondence and interview was undertaken of some current experiences and practices with occupational health record keeping in the area of individual companies and agencies within Canada and the United Kingdom i.e.:

Canada
- Atomic Energy of Canada Limited
- Eldorado Nuclear Limited
- Gulf Canada Limited
- Imperial Oil of Canada Limited
- Dofasco
- Occupational Health Information Systems (OHIS) Canada

United Kingdom
- U.K. Atomic Energy Establishment (UKAEA)
- National Radiation Protection Board

3. Present Types of Data Collection

Present methods and types of data collection were examined. Discussions of a variety of problems experienced by the organizations included:

- the amount and present validity of the data held for occupational health usage;
- the location of the data and access (e.g. personnel, finance, medical or central computer departments);
- the maintenance and updating on an on-going basis; and
- the set up and format for use for long term follow-up studies.

All expressed very positive feelings regarding the possibility of following a recommended standard or guideline.

4. Recommendations on Questionnaire Design

The literature giving recommendations on questionnaire design was examined. [Ref. 9-15]. This included a variety of primary questionnaire design issues such as content, question wording, question sequencing and flow,

and question administration. Secondary elements covered were constraints imposed by cost, time or respondent burden requirements dictating the length of the questionnaire and the amount of detail to be obtained. The method of data collection can also influence the design, as will how often the data is to be collected. Format in the appearance (colour, kind of paper, size or style of type, method of printing) may affect the quality of the data thereby influencing how well the respondents are able to follow instructions and answer the questions.

The meaning of the questions and the respondents ability to answer them correctly are the major factors. It is generally recommended important questions be placed near the beginning of the questionnaire and that sensitive questions often produce better results if placed near the end. Where the question is both important and sensitive its location is left to individual judgement based on experience and testing.

5. Basic Requirements for Epidemiological Studies

Finally, basic requirements for personal identifiers to allow for file linkage with the Canadian Mortality Data Base and the future Canadian Cancer Data Base were determined. These are major criteria in allowing for studies to assess the long term outcome of any exposure to hazardous agents. [Ref. 16-20].

6. Initial Data COllection Form Design

Following these reviews, an initial sample data collection questionnaire was prepared together with guidelines for its completion and for computer entry of the information into a computer data file. The format was prepared on a computer terminal using W-SCRIPT.

At this stage the initial form design and contents were reviewed with Statistics Canada's consultants on form and questionnaire design within the Census and Household Survey Methods group (now the Questionnaire Design Resource Centre (QDRC)).

Appendix A contains copies of two of the many earlier drafts of the questionnaire and accompanying documentation: one very early one and one prior to the pilot test at AECL.

C. METHODOLOGY - PHASE II

1. Testing and Evaluation of the Questionnaire Draft

Writing the questions and sequencing them is a critical step as the question wording must be clear and comprehensible to most respondents in order to minimize erroneous or biased results. It is recommended that the first draft of any questionnaire should be subjected to extensive review or pre-testing to ensure the wording, descriptions and instructions are clear and understandable and to reveal any problems or confusing statements. [Ref. 11].

A review was made of a variety of recommended procedures for testing and evaluating questionnaires [Ref. 9, 10, 11]. Procedures were then developed for testing and evaluating this particular questionnaire and accompanying documentation including the form completion notes and the computer coding instructions. (See Appendix B).

In general, pre-testing involves sending the questionnaire a) to a sample of people as similar as possible to the people who will be receiving the actual final questionnaire, and b) to questionnaire experts who can criticize the draft constructively.

> "Patience and care in this preliminary work may make all the difference between success and failure, both in the co-operation of the respondents and in the reliability and validity of the results".
>
> George A. Lundberg, Social Research, New York, Greenwood Press, 1942

2. Pre-Tests/Pilot Tests

2.1 Informal Testing

The "informal" type of testing relies primarily on subjective evaluations of the questionnaire and documentation, rather than "formal" testing which relies on statistical evaluations. Where time and money are a concern, the relative speed and low cost of an informal test, in comparison with a formal test, make it a logical choice. According to the U.S. Subcommittee on Questionnaire Design [Ref. 11], informal tests are particularly appropriate and useful in discovering poor questionnaire wording or ordering errors in layout or

instructions, as well as negative responses to the length of the questionnaire or the respondents inability or unwillingness to answer any questions (e.g. parents' birth dates). They can also be used to assess the feasibility of using a particular concept in the questionnaire (e.g. marital status, worksite) to determine if the questions seem to elicit appropriate responses and to suggest additional questions or response categories (e.g. common law) which can be pre-coded on the questionnaire. Other objective information which might affect the final questionnaire design, (and which can be obtained in an informal test) is an indication of the time taken to complete the questionnaire (respondent burden), the refusal rate and the administrative costs.

2.2 The Tests

The first pre-test involved development of a few revisions to the questionnaire from discussions with co-workers and expert groups within Statistics Canada involved with general questionnaire design and special surveys i.e. Questionnaire Design Resource Centre (QDRC) and Special Surveys Methodology Group at Statistics Canada.

The second pre-test, termed the "Technical Pilot" involved past experiences by experienced subject matter experts both within and outside Statistics Canada i.e. with representatives involved with work on the Atomic Energy of Canada Ltd. employee health study, the British Columbia Cancer Control Agency, the National Dose Registry at Health and Welfare Canada and the Family History Survey at Statistics Canada.

The third pre-test involved the core pilot testing with three separate groups of participants representing a range of relevant sub-populations i.e. a public service government department (Statistics Canada); a Crown Corporation (Nuclear) Research and Development Agency (Atomic Energy of Canada Ltd); and a private (Chemical) company (Dow Chemical Canada). Three of the authors organized and participated in two of the pilot tests for both the proposed questionnaire and the computer coding i.e. at Statistics Canada and at Chalk River Nuclear Laboratories. Two of the authors visited the Dow Chemical Company, at its Sarnia location.

Samples of correspondence, session formats and feedback evaluation questions are given in Appendix C.

The format of each test was the same at each site i.e.

i) introductory letters were prepared and supplied by the questionnnaire designers for issue to the participants selected.

ii) each local site selected the participants to be as representative as possible of others who would be completing the questionnaire elsewhere. Selection was requested to represent different age, sex and job classification groups.

iii) on the test day selected, the questionnaire designers gave a short introduction to the group assembled to explain the background to the study, the reason for the test and the format of the session.

iv) the testing was undertaken with participants each completing the questionnaire (or coding questionnaires completed with dummy case information) with the aid of the developed explanatory notes (or coding information) only.

v) each participant then completed a written evaluation.

vi) finally a group interview debriefing session provided verbal feedback about any problems encountered with the form in general and each item in particular.

The fourth pre-test was a pilot test involving completion of the questionnaire from file searches by researchers in the field. The revised form and documentation was mailed to four areas for further comments and suggestions, including two provincial areas and two private sector companies. Completed questionnaire forms plus written and verbal (by telephone) feedback with comments and suggestions were received from the provincial areas in Alberta and British Columbia. A verbal reply was received from Dow Chemical. Imperial Oil initially had problems with management not allowing employee information to be entered on the forms. Later, when it was re-emphasized that dummy surnames (or blanks) could be given to test the form, staff cut-backs and lay-offs depleted staff available to carry out the original agreed test. However, some general overall comments were received by telephone together with useful promotion/marketing suggestions.

From information gathered from each of these pre-tests, including comments, completed forms, debriefings, observations and tabulations, changes were made in the questionnaire and accompanying documentation. (See Appendices A & D and Section 4 below).

A final overall review of the whole draft Data Collection Package was undertaken by i) co-analysts within the Occupational and Environmental Health Research Unit at Statistics Canada and ii) the head of the Questionnaire Design Resource Centre at Statistics Canada.

The present questionnaire and accompanying documentation (Appendix D) is the result of these pre-tests, field tests and reviews.

3. Evaluation

There are a number of techniques for evaluating the performance of questionnaires. These techniques use a variety of sources such as interviews, observers, and independent record checks.

3.1 Frame of Reference Probing:

One technique used in this study was investigating respondents' interpretations of questions i.e. frame of reference probing. This attempted to determine whether questions, definitions and instructions proposed for the questionnaire conveyed the meaning or frame of reference desired e.g. worksite, employee number, birth place. Everyone in the pilot tests was included in the probing during the verbal debriefing session after the questionnaires were completed. Problem questions were then deleted or changed for subsequent tests.

3.2 Observation and Monitoring:

As people often express themselves non-verbally, observing the reactions of pretest subjects is important. The study researchers watched to see if some questions were painful, confusing, or annoying, or if the subjects appeared to be witholding information, guessing or answering dishonestly. These areas were brought up and discussed with the subjects to obtain their comments and reactions. e.g. problems with parental dates of birth, spouse's birth date, marital status.

3.3 Interview Debriefings and Written Evaluations:

Participants completed structured written evaluations of the questionnaire form, immediately following the completion of the questionnaire and separately on the computer coding. These requested feedback about items that had caused any difficulty plus any general overall impressions problems or suggestions e.g. length, layout, order. (See forms in Appendix C).

Following this verbal group debriefings including discussions on each item on the questionnaire were carried out with the participants by the researchers. the debriefing process is obviously qualitative rather than quantitative, but it can uncover problems which were not anticipated by the designers.

The questionnaire and accompanying documentation has likely improved as a result of changes from the pretesting. Although there is no guarantee that all potential problems have been uncovered, hopefully the problems that have been discovered and corrected will not recur during future record collection.

4. Form and Documentation Revisions

4.1 Major Revisions:

4.1.1 Questionnaire Form:

The Identity Summary questionnaire form was expanded to 32 questions from an original 29 on Page 1 and to 10 questions from an original 8 on Page 2.

The format and layout were improved. An additional optional page for information on children was included. This would be of interest for genetic follow-up for many different exposures including radiation, chemicals or biological (virus).

4.1.2 Explanatory Notes:

The original two and a half pages of separate notes was cancelled. Where possible explanations were included on the questionnaire form itself. A shortened version (one page) of essential additional explanations was assembled and printed on the back of page one of the questionnaire form.

4.1.3 Computer Coding Advice:

In place of four pages of notes and two Appendices for rules and codes, this was expanded and redesigned to become a computer file record layout plus a data dictionary with a separate page description for each item to include:

- the size and type of record
- a description of the field, including rules and codes to use
- a list of edits to ensure a valid entry is made

4.1 4 Introduction:

This was expanded to include:

i) an explanation on the purpose of the questionnaire form and package

ii) reasons for the collection of the information in a question and answer format rather than a straight statement version for giving to individuals/employees who would be completing the questionnaire form

iii) the importance of maintaining the data base

iv) a reminder of other assessment factors of importance in addition to occupational exposures

v) the importance of the confidentiality and security of records

4.1.5 Package:

The whole information was assembled into a single package, with a special cover, a contents page and section dividers for ease of reference by users across Canada.

See Appendix A for earlier versions of the questionnaire and accompanying documentation and Appendix D for the final revised version.

4.2 Examples of More Details Revisions

4.2.1 Questionnaire Form

A. Question Wording:

- The title of the questionnaire was made more generic by changing from "Employee Identity Summary" to "Individual Identity Summary".

- "Last Name" was included as well as "Surname" to help clarify.

- Worksite was expanded to Worksite/Group Identifiers.

- Employee number was expanded to Employee Number or Case Number.

- Father's Surname was changed to 'Birth' Surname to agree the other surname items.

- For addresses-street and no. was reversed to no. and then street; apartment no. and village/place were added.

- Cause of Death wording was expanded to include 'Official Documentation'.

- "Date" was clarified as date of completion of form.

- For marital status - 'present' was added; "other" category was eliminated, and "common law" was included with "married" category.

- Spouse information was clarified as present or last spouse.

- Page 2 work history "First Hire" and "Rehire" was entered instead of "Date of Hire" on each line. Additional note was added to continue on separate sheet if many rehires.

B. Question Sequencing:

- Vital Status and Source of Information were moved before Last Known Year Alive and Last Known Address.

- Marriage information was moved after spousal information rather than after parental information.

C. Format and Physical Features:

- Addition of 'Title' field.

- Expanded header of the second page of the questionnaire.

- Elimination of separate explanatory notes, reduced to one page and included on the back of the first page of the questionnaire.

- Combining of the children's questionnaire as part of the employee questionnaire rather than as a separate package.

- Standardization of all the boxes to be marked on the left and the value description in lower case lettering on the right.

- Addition of a check box "x" to designate estimated versus actual information entered e.g. parents' birth data.

- Suggest that employer/study organizer decides and preprints the Worksite/Group Identifier field.

4.2.2 Data Dictionary

A. Coding Explanation - Wording

Given Names - addition of instructions for when initials only are available

- added an edit to check that sex codes and given names are compatable

- expanded the list of characters to delete in given names

Title - deleted the marital status titles e.g. Mrs. etc.

Father, Mother and Spouse Given Names - expanded coding to include instructions for double names, prefixes etc.

Work History Termination - repeated instructions on sequencing of work history dates

Cause of Death - expanded to include the 'additional causes of death'

- expanded the coding instructions for ICDs

- included instructions for accidents, injury or poisonings to include the external cause, place of occurrence and nature of injury

Child's Relationship - expansion of code explanation for blood-related (natural) and not blood-related (adopted/foster)

B. Coding Format

Province/Country Code Lists
- lined up columns for easier reading
- list also repeated in alphabetic format

Provincial Health Insurance - changed field length from 10 to 12

Permanent Home Address - added an extra 2 digit field for Province code

Last Known Address - added an extra 2 digit field for Province code

Place of Death - added on extra 2 digit field for Province code

Child's Birth Place - split to enter a 2 digit province code and a 10 digit birth city/town field (from an original 22)

Child's Package and Employee's Package are now combined so child's items can refer to the appropriate pages in the employee's package (i.e. birth place codes) rather than repeat them in the child's package.

D. RESULTS: The Data Collection Package

The developed Data Collection Package for suggested identifying information for occupational and environmental health record keeping is attached in Appendix D.

1. The Contents of the Data Collection Package

The package includes the Individual Identity Summary (IIS) Questionnaire and also introductory comments for the employer and employees/individuals as well as guidelines for file layout and computer coding of the information.

The questionnaire (the IIS) to be completed by or on behalf of the individual has been kept to one page in length. (An optional extra page is supplied where information on children is needed). A second page is for completion by the employer or study organizer. It is anticipated this questionnaire will be completed by:

i) current employees;
ii) new employees;
iii) personnel or occupational health staff for past employees e.g. for creation of a computer data base from historical files;
iv) researchers (epidemiologists, biostatistic--ians) from a file review of a special study cohort.

The form completion instructions have been included on the reverse of the IIS and follow the same order and numbering as the questionnaire. These have been kept to a minimum as strongly suggested during the pilot tests, and attempt to clarify some entries and provide explanations and answers to some typical "problem" questions which arose during the pilot tests and in the reviews of current practices.

The computer coding instructions and record layout are for individuals who will be coding and keying the data collected into a computer data file. A data dictionary format with one page per field was found to be the clearest layout. Field sizes, explanations, editing suggestions and attachments giving standard codes, abbreviations and name rules are included.

A covering explanation for the package has been prepared for the employer or study organizer. This explains a) the reason for the package; b) the contents of the package; c) the importance of maintaining a complete data file; d) other confounding factors that can influence health outcomes; and e) confidentiality provisions.

A suggested Question and Answer explanation has also been prepared for the employee/individual concerned. This provides an overall explanation of why the data is needed, the confidentiality of the information and who to contact regarding further concerns if needed.

2. The Use of the Data Collection Package

The package can be an aid to health researchers and others with a need for a standard or guideline for individual record keeping, particularly where long-term follow-up studies are anticipated.

Some examples of circumstances where the package could be of use include:

(a) to set up or improve an employee occupational health data file, for ongoing health monitoring and/or long-term medical follow-up studies;

(b) to prepare a file of individuals exposed to some local environmental pollutant or toxic agent for long-term follow-up;

(c) to collect consistent information on individuals following various emergencies caused by accidental release of toxic chemicals, radiation, etc., to follow these exposed for long term carcinogenic or genetic effects;

(d) for collection of information in surveys etc. to follow-up population or groups with certain lifestyles for long-term health or genetic effects e.g. smoking, drug or alcohol consumption, nutrition, exercise habits;

(e) for collecting information for vital statistics, cancer and other disease or genetic outcome registries.

It is hoped to obtain feedback following experience with the use of the package in order to update and maintain its continuing use in the future.

E. PROMOTION AND DISSEMINATION OF THE GUIDELINE

The following suggestions have been compiled for the future promotion and communication regarding the availability of the Data Collection Package.

Objective:

To make known the existence and purpose of the Individual Identity Summary (IIS) and the Data Collection Package to those organizations and researchers who might use or be interested in its guidelines.

Methods:

A. The inclusion of information on the Data Collection Package in the Occupational and Environmental Health Research Unit's (OEHRU) new promotion brochure.

B. The selection of a suitable cover and printing presentation format.

C. Tracing contacts and mailing the Data Collection Package or providing information on its existence - see Table I and Appendix E.

Direct mailing to:

1) individual large companies with known medical or occupational health departments, with a covering explanatory letter;

2) the larger labour associations with occupational health sections e.g. the Canadian Labour Congress (CLC), the United Auto Workers (UAW), with a covering explanatory letter.

3) known professionals in this area of the health research field, e.g. epidemiologists/biostatisticians in federal government, provincial government, university, industry and labour organizations, with a covering explanatory letter.

The covering letters should explain briefly and concisely the purpose, importance, and type of results obtainable. They should also offer assistance, a contact name to approach for more information, and additional copies of the Package..

TABLE 1

HEALTH RECORD KEEPING IN CANADA
DATA COLLECTION PACKAGE
MARKETING/PROMOTION

DIRECT ROUTE

1. . Individual Companies

   a) Large Companies With Medical or Occupational Health Departments e.g.NDR Companies/organizations Imperial Oil, Dow, Alcan, Ontario Hydro.

   b) Contact Name and Address

2. . Individual Unions

   . CLC Occ. & Env. Health
   . Other Large Unions

3. . Known Professionals in the Field

   . Provincial Epidemiologists
   . Epidemiologists in University
   . Epidemiologists in Industry
   . AECB Review Panel Participants

INDIRECT ROUTE

1. . Announcements/Articles

   . Journals (Occ. H&S)
   . Associations Newsletters
     - Employers
     - Labour Unions

2. . Exhibits/Papers

   . Conferences: Occ. Health, Radiation, Chemical, etc.

3. . Relevant Organizations in the Field

   . Provincial Ministries of Labour (Occ H&S)
   . WCB's in each Province
   . Provincial Cancer Registries
   . Provincial Vital Statistics Registries
   . National Cancer Institute of Canada (NCIC)
   . Health & Welfare (H & WC)
   . Medical Research Council (MRC)
   . University Epidemiology , Occupational or Community Health Departments

4. . Other Organizations

   . Health & Safety Councils
   . Health Advisory Councils

5. . International Bodies:

   . World Health Organization (WHO)
   . International Labour Organization (ILO)

Indirect routes to reach a wide variety of contacts in the Occupational and Environmental health field would include:

i) Announcements or articles in relevant journals and Company or Union Association Newsletters.

ii) Setting up posters or exhibits at relevant conferences and meetings in the areas of occupational health, radiation, chemical, etc. areas.

iii) Sending information to known organizations with interests in the field e.g. Federal and Provincial department of health and labour; government labour or health boards, agencies, councils; university departments of epidemiology, occupational and community health.

iv) Sending information, articles, and announcements to other organizations in the field e.g. Health and Safety Councils, Health Advisory Councils.

v) Providing information to international bodies such as the World Health Organization (WHO), and the International Labour Organization (ILO) who have expressed a need for such information in their publications.

D. Contact Statistics Canada, Marketing Division for recommendations or assistance with contacts and liaisons for making the Data Collection Package more widely known.

Provide a copy to Statistics Canada's Questionnaire Design Resource Centre (QDRC)

i) for inclusion in their inventory; and

ii) for liaison with their networks within and outside Statistics Canada.

F. SUMMARY

This two year project has developed and tested a recommended basic guideline for the standard collection of personal identifying information for health record keeping. This has been prepared in the form of an Individual Identity Summary questionnaire and accompanying documentation in the form of a "Data Collection Package".

The accompanying documentation includes form completion assistance notes and computer coding instructions for entering the information into an appropriate occupational health data record file.

Covering explanations for both the employer and employee or individual concerned on the need for the information being requested have been included.

The guideline has taken into account comments, experiences and suggestions from companies and agencies presently operating occupational health programs or preparing to start such a program. Comments and suggestions from form design experts have also been incorporated as well as essential information needs for future long term medical follow-up using the Canadian Mortality Data Base and other health outcome files.

Phase II of the project included a series of pre and pilot tests with representative individuals and experts before this final recommendation for printing and circulation was assembled.

Promotion and marketing plans for the Data Collection Package have been initiated and will continue following this contract.

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ACKNOWLEDGEMENTS

The authors of this report would like to acknowledge and thank those who assisted in the development of this "Data Collection Package" and the final report. These include

i) Atomic Energy of Canada Limited (AECL) for the use of their original draft employee identity questionnaire;

ii) Statistics Canada, AECL - Chalk River Nuclear Laboratories, and Dow Chemical, Sarnia for time spent in the pilot tests of earlier drafts of the questionnaire and computer coding forms, as well as providing feedback.

iii) B.C. Cancer Control Agency - John Spinelli and Alberta Government, Occupational Health and Safety - Brian Alleyne for helpful comments and suggestions from file reviews using an earlier draft of the questionnaire.

iv) Azadeh Mosavat for assistance during her employment period with Statistics Canada, Health Division, especially for the graphics and source review for Appendix 4, the Promotion and Marketing section of the report.

APPENDIX A

EARLIER DRAFTS OF QUESTIONNAIRE AND DOCUMENTATION

HEALTH RECORD KEEPING PRACTICES

Occupational and Environmental Health Research Unit
Vital Statistics and Health Status Section
Health Division
18th Floor, R.H. Coats Building
Tunney's Pasture
Ottawa, Ontario
K1A 0T6

June 5, 1986

HEALTH RECORD KEEPING PRACTICES

Attached is a recommended Employee Identity Summary Sheet along with the accompanying documentation for form completion and computer coding. Please keep in mind that these suggested items to be collected are required for linkage with the Mortality Data Base for long term health studies, but if you have other data elements you feel should be included, please feel free to include these on your tape.

1. FORM COMPLETION INSTRUCTIONS:

These completion instructions were developed with three different data collection methods in mind: 1)to be directly used by an employee as he/she completes the form; 2)to be used by someone, for example in the personnel department,to verbally assist an employee in completing the form;or 3)to be used by someone conducting a file search, including historic records.

2. COMPUTER CODING INSTRUCTIONS:

These instructions are to be used by the individuals who will be coding and keying the data collected on the summary sheet. We have suggested a minimum length for each field. You may increase your field to any reasonable length but please ensure that each field is at least the minimum and that once a field length is determined, all records on that file will have the same field length and will not vary from record to record. As a general rule of thumb, it is suggested that all alphabetic fields be left justified and any fields containing numerics be right justified. We have provided the codes necessary as well as remarks on some of the more common keying errors that occur.

THE ABOVE GUIDELINES AND ATTACHMENTS ARE SUGGESTED FORMATS. IF YOU HAVE ANY PROBLEMS OR QUESTIONS ABOUT ADAPTING YOUR DATA TO THIS FORMAT PLEASE FEEL FREE TO CONTACT STATISTICS CANADA, VITAL STATISTICS AND HEALTH STATUS SECTION, HEALTH DIVISION, 18TH FLOOR, R.H. COATS BUILDING, TUNNEY'S PASTURE, OTTAWA.

EMPLOYEE IDENTITY SUMMARY

_____ is planning to undertake a long-term health study of its' employees to ensure that sound safety standards are being met for a healthy workplace. We are therefore asking you to complete the enclosed Employee Identity Summary Sheet.

The items requested enable our employee data base to be checked against the Canadian Mortality Data Base and other health outcome data bases for health studies in the future. The relevancy of some items, such as parental or spousal information is to ensure correct identification when checking later against health outcome files of disease, death or genetic effects. The reason you may have been asked to provide some information already given to the personnel department is to confirm that the information held is still valid and to keep the study as a seperate entity from the personnel records to ensure confidentiality.

Please be assured that your data will be maintained in the strictest of confidence and no information will be released which may identify any individual.

Completion of the form is purely voluntary but we strongly recommend that you participate in this study in order to benefit yourself and your fellow employees.

If you have any questions or concerns, please feel free to contact the under-signed.

Thank you for your co-operation.

EMPLOYEE IDENTITY SUMMARY

EMPLOYEE WORKSITE ..... DATE: .....

THIS INFORMATION IS FOR HEALTH STUDIES TO HELP ENSURE SOUND SAFETY STANDARDS

PLEASE PRINT

1) Employee Number ..... _____ .....

2) Surname ..... _____ .....

3) Alternate Surname(s) Used.... _____ .....

Maiden Surname ..... _____ .....

4) First Given Name ..... _____ .....

5) Second Given Name ..... _____ .....

6) Third Given Name (if any) ... _____ .....

7) Usual Name or Nickname ..... (if different from above) _____ .....

8) Sex ..... ☐ Male ☐ Female .....

9) Marital Status..... ☐ Single ☐ Married ☐ Widowed ☐ Divorced ☐ Other .....

10) Birth Date ..... |_|_|_|_| _____ |_|_| (Year / Month / Day) .....

11) Birth Country ..... ☐ Canada ☐ Outside Canada (Specify)_____ .....

12) Birth Place ..... City/Town _____ Prov_____ (or State or Region if not Canada) .....

13) Father's Surname ..... _____ .....

14) Father's First Name ..... _____ .....

15) Father's Second Name ..... _____ .....

16) Father's Birth Place ..... City/Town_____ Prov_____ (or Country if not Canada) .....

17) Mother's Maiden Name ..... _____ .....

18) Mother's First Name ..... _____ .....

19) Mother's Second Name ..... _____ .....

20) Mother's Birth Place ..... City/Town_____ Prov_____ (or Country if not Canada) .....

21) Spouse's Birth Surname ..... _____ .....

22) Spouse's First Name ..... _____ .....

23) Spouse's Second Name ..... _____ .....

24) Spouse's Birth Place ..... City/Town_____ Prov/Country_____ .....

25) Marriage ..... Date |_|_|_| _____ |_|_| (Year / Month / Day) Prov_____ (or Country if not Canada) .....

26) Social Insurance Number ..... |_|_|_| |_|_|_| |_|_|_| .....

27) Prov. Health Insurance Number Prov_____ Number_____ .....

28) Superannuation Number ..... _____ .....

29) Current Address ..... _____ (Street) ..... _____ (City/Town) Prov/Country |_|_|_|_|_|_| (Postal Code) .....

FOR OFFICE USE ONLY

EMPLOYEE NUMBER .....

SURNAME .....

Employment Dates:

30) Starting Date ..... |_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

31) Termination Date ... |_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

32) Last Known Year Alive |_|_| Year .....

33) Last Known Address _____ Street .....

_____ City/Town Prov/Country |_|_|_| |_|_|_| Postal Code .....

34) Vital Status ..... ☐ Known Alive ☐ Known Dead ☐ Status Unknown .....

35) Date of Death ..... |_|_| Year _____ Month |_|_| Day .....

36) Place of Death ..... City/Town _____ Prov _____ (or Country if not Canada) .....

37) Cause(s) of Death .....

1. If Documentation or Death Certificate:

a) Immediate Cause: _____ .....

b) Antecedent Causes Stating Underlying Cause Last: _____ .....

_____ .....

c) Other Significant Contributing Conditions:

_____ .....

_____ .....

2. Other Known Information: _____ .....

_____ .....

EMPLOYEE IDENTITY SUMMARY SHEET

FORM COMPLETION

DATA ELEMENT	FORM COMPLETION INSTRUCTIONS
1 EMPLOYEE NUMBER	Refers to employee number. If no employee number, leave blank.
2 SURNAME	Refers to surname currently used.
3 ALTERNATE SURNAME	Refers to alternate surnames ever used including maiden surnames, other married surnames or alternate spellings of surname.
4 FIRST GIVEN NAME	Refers to first given name. Spell out full given name even if a nickname or short form of name is normally used. See (7) below.
5 SECOND GIVEN NAME	Refers to second given name. Spell out in full.
6 THIRD GIVEN NAME	Refers to third given name. Spell out in full.
7 NICKNAME	Refers to any nicknames that are frequently used. May also be an anglicized version of a European or oriental name.
8 SEX	Check the appropriate box.
9 MARITAL STATUS	Check the appropriate box.
10 BIRTH DATE	
Year	Refers to the year of birth, including century i.e. 1950 or 1890
Month	Refers to the month of birth. Spell out to avoid confusion with the day.
Day	Refers to day of birth.
11 BIRTH COUNTRY	Check the appropriate box. If born outside Canada, specify country.
12 BIRTH PLACE	Refers to city, town or village with appropriate Province, State or other region of birth even if born outside Canada.
13 FATHER'S SURNAME	Refers to father's surname even if deceased.

DATA ELEMENT	FORM COMPLETION INSTRUCTIONS
14 FATHER'S FIRST NAME ..	Refers to first given name.
15 FATHER'S 2ND NAME	Refers to second given name.
16 FATHER'S BIRTH PLACE	
City	Refers to city, town or village of birth.
Prov/Country	Refers to specific province if born in Canada or to specific country if born outside Canada.
17 MOTHER'S MAIDEN	Refers to Mother's maiden surname even if deceased.
18 MOTHER'S FIRST NAME ..	Refers to first given name.
19 MOTHER'S 2ND NAME	Refers to second given name.
20 MOTHER'S BIRTH PLACE	
City	Refers to city, town or village of birth.
Prov/Country	Refers to specific province if born in Canada or to specific country if born outside Canada.
21 SPOUSE'S BIRTH SURNAME	Refers to spouse's birth surname.
22 SPOUSE'S FIRST NAME ..	Refers to first given name.
23 SPOUSE'S 2ND NAME	Refers to second given name.
24 SPOUSE'S BIRTH PLACE	
City	Refers to city,town or village of birth.
Prov/Country	Refers to specific province if born in Canada or to specific country if born outside Canada.
25 MARRIAGE	
Date	Refers to the year, not including the century. Spell out the month to avoid confusion with the day.
Province	Refers to place of marriage i.e. province or country if outside Canada.
26 SOCIAL INSURANCE NO ..	Refers to SIN number. Ensure there are 9 digits.
27 PROVINCIAL HEALTH INSURANCE NO.	
Province	Refers to the Province of your Health Insurance Plan.
Number	Refers to the policy number of the health plan used in your province. i.e. in Ontario record your O.H.I.P. number.

DATA ELEMENT	FORM COMPLETION INSTRUCTIONS
28 SUPERANNUATION NO. ...	Refers to superannuation number (pension plan number). If unknown, leave blank for employer to complete.
29 CURRENT ADDRESS	Refers to full current address. If address is not permanent provide a mailing address.
City	Refers to city, town or village of present residence.
Province	Refers to province of present residence.
Postal Code	Ensure all spaces completed.

EMPLOYEE IDENTITY SUMMARY SHEET

COMPUTER CODING INSTRUCTIONS

DATA ELEMENT	DATA TYPE	RECOMMENDED LENGTH (MINIMUM)	COMPUTER CODING INSTRUCTIONS
1 EMPLOYEE NUMBER	A/N	9	Enter either a valid employee number or an assigned study number. May be numeric or combination of alphabetic and numeric. May be any length. Remarks: 1. Ensure numbers are unique and not reused. 2. Ensure that each individual has only one unique number.
2a CONTROL CODE	Numeric	1	See Appendix A, Section E for codes. Also see Appendix B for further explanation of codes.
2b SURNAME	Alpha	10	See Appendix B for instructions on coding surnames.
3 ALTERNATE SURNAME	Alpha	10	1. Follow instructions for coding surnames in Appendix B. 2. An alternate record will be created for this surname and linked to the original current surname record. 3. For females this field may contain a maiden name and/or a previous married surname. For males this field may include surname changes through adoption etc.
4 FIRST GIVEN NAME	Alpha	9	1. Enter full spelling of 1st given name 2. If deemed necessary, enter abbreviations such as Jr., Sr. etc. as a separate field which can be added. Remarks: Ensure that if initials only are available that they are separated by blanks and recorded in their respective fields.
5 SECOND GIVEN NAME	Alpha	7	Follow rules for coding 1st given name in (4) above.
6 THIRD GIVEN NAME	Alpha	7	Follow rules for coding 1st given name in (4) above.
7 NICKNAME	Alpha	7	Follow rules for coding 1st given name in (4) above.
8 SEX	Numeric	1	Male.....1 Female.....2 Unknown.....Blank Remarks: If possible, use numeric codes. If using "M" and "F" ensure consistency.
9 MARITAL STATUS	Numeric	1	Single.....1 Married.....2 Widowed.....3 Divorced....4 Other.....5 Unknown.....Blank

DATA ELEMENT	DATA TYPE	RECOMMENDED LENGTH (MINIMUM)	COMPUTER CODING INSTRUCTIONS
10 BIRTH DATE			
Year	Numeric	4	1.First 2 digits of year must be the century i.e. '19' or '18'. 2.Last 2 digits must be in the range 00-99. 3.Blank if unknown
Month	Numeric	2	January.....01 February.....02 March.....03 April.....04 May.....05 June.....06 July.....07 August.....08 September.....09 October.....10 November.....11 December.....12 Unknown.....Blank Be alert to months exceeding 12.
Day	Numeric	2	Remarks: Check for interchanges of month and day. Ensure days do not exceed 31.
11 BIRTH COUNTRY	Numeric	2	See Appendix A for Statistics Canada Province/ Country codes. A more extensive coding list is available from Statistics Canada when a large number of birth countries are unfamiliar.
12 BIRTH PLACE			
City	Alpha	10	Enter up to 10 letters of birth city.
Prov/Country	Numeric	2	Use Appendix A, Statistics Canada Province/ Country codes.
13 FATHER'S SURNAME	Alpha	10	Follow instructions for coding surnames on Appendix B. See (2b) above.
14 FATHER'S FIRST NAME ..	Alpha	1	Enter full 1st given name. See rules in (4) above.
15 FATHER'S 2ND NAME	Alpha	1	Enter full 2nd given name. See rules in (4) above.
16 FATHER'S BIRTH PLACE			
City	Alpha	10	Enter up to 10 letters of birth city.
Prov/Country	Numeric	2	Use Appendix A, Statistics Canada Prov/Country codes.
17 MOTHER'S MAIDEN NAME	Alpha	10	Use Appendix B for coding surnames as for (2b) above.
18 MOTHER'S FIRST NAME ..	Alpha	1	Enter full 1st given name. See rules in (4) above.
19 MOTHER'S 2ND NAME	Alpha	1	Enter full 2nd given name. See rules in (4) above.
20 MOTHER'S BIRTH PLACE			
City	Alpha	10	Enter up to 10 letters of birth city.
Prov/Country	Numeric	2	Use Appendix A, Statistics Canada Province/ Country codes as for (12) above.

DATA ELEMENT	DATA TYPE	RECOMMENDED LENGTH (MINIMUM)	COMPUTER CODING INSTRUCTIONS
21 SPOUSE'S BIRTH SURNAME	Alpha	10	Use Appendix B for coding surnames as for (2b) above.
22 SPOUSE'S FIRST NAME ..	Alpha	7	Enter as in rules for (4) above.
23 SPOUSE'S 2ND NAME	Alpha	7	Enter as in rules for (4) above.
24 SPOUSE'S BIRTH PLACE			
City	Alpha	10	Record up to 10 letters of birth city.
Prov/Country	Numeric	2	Use Appendix A, Statistics Canada Province/ Country codes.
25 MARRIAGE			
Date	Numeric	6	Coded year/month/day. See coding instructions for item 10 omitting century in this case.
Prov/Country	Numeric	2	Use Appendix A, Statistics Canada Province/ Country codes.
26 SOCIAL INSURANCE NO ..	Numeric	5	Key 5 numeric fields without hyphens. Helps to identify duplicate records on file. Include valid number check in acceptance program.
27 PROVINCIAL HEALTH INSURANCE NUMBER	A/N		Key first 2 digits as Province (See Appendix A, Item C1). Length for number dependent upon Province.
28 SUPERANNUATION NO. ...	A/N		Length unique to individual companies.
29 CURRENT ADDRESS			
City	Alpha	10	Enter up to 10 letters of address city.
Province	Numeric	2	Use Appendix A for Statistics Canada Prov./ Country codes.
Postal Code	A/N	6	Key correct fields i.e. alpha, numeric,alpha; numeric,alpha,numeric.

DATA ELEMENT	DATA TYPE	RECOMMENDED LENGTH (MINIMUM)	COMPUTER CODING INSTRUCTIONS
EMPLOYMENT DATES:			If more than one employment period, enter in chronological sequence beginning with the last period. Note rules as in (10) above.
30 STARTING DATE	Numeric	6	Enter year, month and day that an employee begins employment. Useful to link with work history and dose exposure files. Also used to confirm a last known alive date.
31 TERMINATION DATE	Numeric	6	Enter year, month and day that an employee terminates employment. May be used as the Last Known Alive Date.
32 LAST KNOWN YEAR ALIVE	Numeric	2	Enter last known year of contact. In most cases this will be the date of termination. In some cases contact may have been made with an employee after termination. Enter that year. If known dead, record year of death.
33 LAST KNOWN ADDRESS City	Alpha	10	Enter city of last contact. Enter up to 10 letters of city.
Prov/Country	Numeric	2	Enter province or country of last contact. Use Appendix A for Statistics Canada Prov/Country codes.
Postal Code	A/N	6	Enter postal code if known. Ensure correct keying i.e. alpha.numeric.alpha; numeric.alpha.numeric.
34 VITAL STATUS	Numeric	1	Known Alive.....1 Known Dead.....2 Unknown.....3
35 DATE OF DEATH	Numeric	6	Enter first 2 digits for year, next 2 for month and last 2 for day. If only year is available, code first 2 digits for year and leave remaining 4 positions blank.
36 PLACE OF DEATH Prov/Country	Numeric	2	Enter province or country of death if available. Use Statistics Canada Province/Country codes. Appendix A.
City	Alpha	10	Enter city of death where known.
37 CAUSE OF DEATH	A/N	4	1. Code the underlying cause as shown on the death certificate as in the International Classification of Disease (ICD) Manuals. If a study is on-going, use the ICD version being used at the time of the data collection. If a study is retrospective then you may prefer to use only one version through the entire file review process. If ICD codes are not known, enter the underlying cause of death in full or; 2. Enter in full any cause of death known informally.

Appendix A

CODES AND ABBREVIATIONS

A. SEX CODES:

1 male	2 female	blank; not stated

B. MARITAL STATUS CODES:

1 single	3 widowed	5 separated
2 married	4 divorced	blank; not stated

C. PROVINCE/COUNTRY CODES:

1. CANADA

01 PEI	05 Ont	09 BC	17 Canada
02 NS	06 Man	10 Yukon	18 Other Brit possessions in America
03 NB	07 Sask	11 NWT	
04 PQ	08 Alta	12 NFLD	

2. BRITISH ISLES

21 England	23 Irish Free State	25 Wales
22 N. Ireland	24 Scotland	26 Lesser Isles

3. BRITISH POSSESSIONS AND FORMER POSSESSIONS

31 Australia & Terr	35 India
32 New Zealand	35 Pakistan
33 S&SW Africa	36 Other British Asia
34 Other Brit Africa	37 Other British

4. AMERICAN COUNTRIES

41 U.S.A.	43 Other N. Amer.	45 South American
42 Mexico	44 Central American	

5-7 EUROPEAN COUNTRIES

51 Albania	58 Finland	64 Iceland	71 Roumania
52 Austria	59 France	65 Italy	72 Spain
53 Belgium	60 Germany	66 Latvia	73 Sweden
54 Bulgaria	61 Greece	67 Lithuania	74 Switzerland
55 Czechoslovakia	62 Holland (Netherlands)	68 Norway	75 Yugoslavia
56 Denmark		69 Poland	76 Other Europe
57 Estonia	63 Hungary	70 Portugal	77 U.S.S.R.

8. ASIATIC COUNTRIES

82 China	84 Syria	86 Other Asiatic
83 Japan	85 Turkey	

9. AFRICAN & OTHER

91 African (not British)	93 Other countries	98 At Sea
	96 Palestine, Israel	99 Place Not Shown

D. DUAL PLACE NAME ABBREVIATIONS

ST	Saint	F	Front	IR	Indian Reserve
STE	Sainte	B	Bay, Baie	FT	Fort
N	North, Nord	I	Isle, Ile, Island	PT	Port
S	South, Sud			PR	Prince
E	East, Est	L	Lake, Lac	MT	Mount, Mont
W	West	R	River, Riviere	GR	Grand, Grande
O	Ouest	D	Notre Dame	T	Township
LOW	Lower	MID	Middle	UPP	Upper

CEN Central PNT Point

E. ENTRY CONTROL CODES (re SURNAMES)
1 "Original entry" of a surname (i.e. present surname as given on record).
2 Alternative form of surname.
3 (not used in the Mortality Data Base)
4 "Original" maiden surname of ever-married woman.
5 Alternative form of the maiden surname.

Appendix B

SURNAME RULES

1. SURNAME LENGTH

-Key a full 10 characters of all surnames having 10 or more. Ignore remainder. This will ensure that the phonetic code 1 will match that of the Mortality Data Base.

2. DOUBLE SURNAMES (with or without hyphens)

-Key an "original" entry" record using the concatenated form (i.e. the two names joined together without space or hyphen). Use "entry control code"=1.

-Key an "alternative entry" record using just the first of the two surnames. Use "entry control code"=2.

-Key on a second "alternative entry" record using just the second of the two surnames. Use "entry control code"=2.

Example: SMITH-JONES becomes SMITHJONES (control code 1)

SMITH (control code 2)

JONES (control code 2)

(the purpose is to cross-reference all likely variants of the name as an aid to searching.)

3. PREFIXED SURNAMES

-Key without spacing or punctuation, so that the whole surname (i.e. concatenate). Abbreviate Saint to St, Sainte to STE.

Examples: VON WILLIAMS becomes VONWILLIAMS

O'REILLY becomes OREILLY

DE LUCA becomes DELUCA

4. SUFFIXED SURNAMES

-Omit altogether, suffixes such as JR and SR. (Especially, do not confuse these with given names or initials.)

5. ALTERNATIVE SURNAMES, ALTERNATIVE SPELLING OF SURNAMES

-Key in special field; a cross-referencing entry record can be made later if needed. (Do not discard alternative spellings, even if "incorrect".)

6. MAIDEN SURNAMES OF MARRIED WOMEN

-Normally the surname field will contain the current surname and in the case of a married woman, the father's surname field will contain her maiden surname. However, a cross-referencing entry record may be created later for searching purposes, in which the maiden surname has been moved to the surname field. Such records will carry an entry control code=4.

7. ALTERNATIVE FORM OF MAIDEN SURNAME

-Where the maiden surname of a married woman has more than one form or spelling, key an "alternative entry" record with the second form or spelling of the maiden surname appearing in the "surname" field. Such records will carry an entry control code=5.

B.1 GIVEN-NAME RULES

a. GIVEN-NAME LENGTH

-Key 9 characters of the first given name and 7 characters of the second (plus 1-4 characters of any third given name, if possible). (if only initials are available, do not squeeze them into the first- name field; keep them in the appropriate fixed positions.)

b. HYPHENATED GIVEN NAMES

-Treat as two seperate given names, and omit the hyphen.

c. ABBREVIATIONS

-Do not abbreviate Joseph, Mary and Marie. (This has been done in some vital statistics indexes.)

HEALTH RECORD KEEPING PRACTICES

Occupational and Environmental Health Research Unit
Vital Statistics and Disease Registries Section
Health Division
Statistics Canada
18th Floor, R.H. Coats Building
Tunney's Pasture
Ottawa, Ontario
K1A 0T6

September 1986

EMPLOYEE IDENTITY SUMMARY

ORGANIZATION ..... DATE: |_|_|_|_| _____ |_|_|
Year Month Day

LOCATION .....
CONFIDENTIAL WHEN COMPLETED

	PLEASE PRINT	OFFICE USE ONLY
1) EMPLOYEE NUMBER	_____	.....
2) SURNAME	_____	.....
3) MAIDEN SURNAME	_____	.....
4) OTHER SURNAME(S) USED	_____	.....
5) FIRST GIVEN NAME	_____	.....
6) SECOND GIVEN NAME	_____	.....
7) THIRD GIVEN NAME (IF ANY) ...	_____	.....
8) USUAL NAME OR NICKNAME ..... (IF DIFFERENT FROM 5 ABOVE)	_____	.....
9) SEX	☐ Male ☐ Female	.....
10) MARITAL STATUS.....	☐ Single ☐ Married ☐ Widowed ☐ Divorced ☐ Other	.....
11) BIRTH DATE	|_|_|_|_| (Year) _____ (Month) |_|_| (Day)	.....
12) BIRTH COUNTRY	☐ Canada ☐ Outside Canada (Specify)_____	.....
13) BIRTH PLACE	City/Town _____ Prov (or State or Region if not Canada)	.....
14) FATHER'S SURNAME	_____	.....
15) FATHER'S FIRST NAME	_____	.....
16) FATHER'S SECOND NAME	_____	.....
17) FATHER'S BIRTH PLACE	City/Town_____ Prov (or Country if not Canada)	.....
18) BIRTH DATE:	|_|_|_|_| (Year) _____ (Month) |_|_| (Day)	.....
19) MOTHER'S MAIDEN SURNAME	_____	.....
20) MOTHER'S FIRST NAME	_____	.....
21) MOTHER'S SECOND NAME	_____	.....
22) MOTHER'S BIRTH PLACE	City/Town_____ Prov (or Country if not Canada)	.....
23) BIRTH DATE:	|_|_|_|_| (Year) _____ (Month) |_|_| (Day)	.....
24) MARRIAGE	Prov (or Country if not Canada)_____ Date |_|_| (Year) _____ (Month) |_|_| (Day)	.....
25) SPOUSE'S BIRTH SURNAME	_____	.....
26) SPOUSE'S FIRST NAME	_____	.....
27) SPOUSE'S SECOND NAME	_____	.....
28) SPOUSE'S BIRTH PLACE	City/Town_____ Prov/Country_____	.....
29) BIRTH DATE:	|_|_|_|_| (Year) _____ (Month) |_|_| (Day)	.....
30) SOCIAL INSURANCE NUMBER	|_|_|_| |_|_|_| |_|_|_|	.....
31) PROV. HEALTH INSURANCE NUMBER	Prov_____ Number_____	.....
32) USUAL RESIDENCE	_____ (Street)	.....
	_____ (City/Town) _____ (Prov/Country) |_|_|_| |_|_|_| (Postal Code)	.....

EMPLOYEE IDENTITY SUMMARY

WE ARE ASKING YOU TO COMPLETE THIS EMPLOYEE IDENTITY SUMMARY FORM TO MAKE IT POSSIBLE FOR A VARIETY OF HEALTH STUDIES TO BE UNDERTAKEN TO ASSIST IN HEALTH PROMOTION ACTIVITIES. PREVENTION PROCEDURES AND SOUND SAFETY STANDARDS IN THE WORK PLACE. SUCH STUDIES ARE SUPPORTED BY BOTH UNION AND MANAGEMENT. THE INFORMATION REQUESTED IS TO ENSURE CORRECT IDENTIFICATION WHEN CHECKING LATER AGAINST GENERAL HEALTH FILES OF DISEASE. DEATH OR GENETIC EFFECTS. AND WILL BE ANALYZED PURELY AS STATISTICAL RECORDS.

PLEASE BE ASSURED THAT YOUR INFORMATION WILL BE MAINTAINED IN THE STRICTEST OF CONFIDENCE AND NO INFORMATION WILL BE RELEASED WHICH MAY IDENTIFY ANY INDIVIDUAL. THE PRIVACY OF EACH AND EVERY EMPLOYEE WILL BE STRICTLY PRESERVED: THE COMBINED DATA WILL HELP YOURSELVES AND YOUR FELLOW EMPLOYEES AND MAY ALSO MAKE A VALUABLE CONTRIBUTION TO MEDICAL RESEARCH IN GENERAL.

IF YOU HAVE ANY QUESTIONS OR CONCERNS. PLEASE FEEL FREE TO CONTACT YOUR MANAGEMENT OR UNION REPRESENTATIVE.

THANK YOU FOR YOUR CO-OPERATION.

FOR OFFICE USE ONLY

EMPLOYEE NUMBER .....

SURNAME ..... INITIALS .....

33) PENSION PLAN NUMBER ..... _____ .....

EMPLOYMENT DATES:

34) STARTING DATE ..... |_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

35) TERMINATION DATE .. |_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

|_|_| Year _____ Month |_|_| Day

36) LAST KNOWN YEAR ALIVE |_|_| Year .....

37) LAST KNOWN ADDRESS _____ Street .....

_____ City/Town Prov/Country |_|_|_| |_|_|_| Postal Code .....

38) VITAL STATUS ..... |_| Known Alive |_| Known Dead |_| Status Unknown .....

39) DATE OF DEATH ..... |_|_| Year _____ Month |_|_| Day .....

40) PLACE OF DEATH ..... City/Town_____ Prov (or Country if not Canada) _____ .....

41) CAUSE(S) OF DEATH .....

1. If Documentation or Death Certificate:
   a)Immediate Cause: _____ .....

   b)Antecedent Causes Stating Underlying Cause Last: _____ .....

   _____ .....

   c)Other Significant Contributing Conditions:

   _____ .....

   _____ .....

2. Other Known Information: _____ .....

   _____ .....

EMPLOYEE IDENTITY SUMMARY SHEET

FORM COMPLETION

DATA ELEMENT	FORM COMPLETION INSTRUCTIONS
1 EMPLOYEE NUMBER	If no employee number, leave blank.
2 SURNAME	Refers to surname currently used.
3 MAIDEN SURNAME	Refers to woman's surname at birth or adoption.
4 OTHER SURNAME	Refers to other surnames ever used including other married surname, alternate spellings of surname, legal changes, aliases etc.
5 FIRST GIVEN NAME	Spell out full given name even if a nickname or short form of name is normally used. See (8) below.
6 SECOND GIVEN NAME	Spell out in full.
7 THIRD GIVEN NAME	Spell out in full.
8 NICKNAME	Refers to any names that are frequently used if different from first given name in (5) above. May be nicknames, short form of given name or an anglicized version of a European or Oriental name.
9 SEX	Check the appropriate box.
10 MARITAL STATUS	Check the appropriate box. Single=never married.
11 BIRTH DATE Year	Refers to the year of birth, including century. i.e. 1950 or 1890
Month	Refers to the month of birth. Spell out to avoid confusion with the day.
Day	Refers to day of birth.
12 BIRTH COUNTRY	Check the appropriate box. If born outside Canada, specify country.
13 BIRTH PLACE	Refers to city, town or village with appropriate Province, State or other region of birth even if born outside Canada.

DATA ELEMENT	FORM COMPLETION INSTRUCTIONS
14 FATHER'S SURNAME	Refers to father's surname at birth or adoption even if deceased.
15 FATHER'S FIRST NAME ..	Spell out in full even if a nickname or short form of name is normally used.
16 FATHER'S 2ND NAME	Spell out in full.
17 FATHER'S BIRTH PLACE	
City	Refers to city, town or village of birth.
Prov/Country	Refers to specific province if born in Canada or to specific country if born outside Canada.
18 FATHER'S BIRTH DATE ..	Enter the year, including the century. Spell out the month to avoid confusion with the day.
19 MOTHER'S MAIDEN SURNAME	Refers to Mother's surname at birth or adoption even if deceased.
20 MOTHER'S FIRST NAME ..	Spell out in full even if a nickname or short form of name is normally used.
21 MOTHER'S 2ND NAME	Spell out in full.
22 MOTHER'S BIRTH PLACE	
City	Refers to city, town or village of birth.
Prov/Country	Refers to specific province if born in Canada or to specific country if born outside Canada.
23 MOTHER'S BIRTH DATE ..	Enter the year, including the century. Spell out the month to avoid confusion with the day.
24 MARRIAGE	
Province	Refers to place of marriage i.e. province or country if outside Canada.
Date	Enter the year, not including the century. Spell out the month to avoid confusion with the day.
25 SPOUSE'S BIRTH SURNAME	Refers to current spouse's surname at birth or adoption.
26 SPOUSE'S FIRST NAME ..	Spell out in full even if a nickname or short form of name is normally used.
27 SPOUSE'S 2ND NAME	Spell out in full.
28 SPOUSE'S BIRTH PLACE	
City	Refers to city,town or village of birth.
Prov/Country	Refers to specific province if born in Canada or to specific country if born outside Canada.
29 SPOUSE'S BIRTH DATE ..	Enter the year, including the century. Spell out the month to avoid confusion with the day.

DATA ELEMENT	FORM COMPLETION INSTRUCTIONS
30 SOCIAL INSURANCE NO ..	Refers to SIN number. Ensure there are 9 digits.
31 PROVINCIAL HEALTH INSURANCE NO.	
Province	Refers to the Province of your Health Insurance Plan.
Number	Refers to the policy number of the health plan used in your province. i.e. in Ontario record your O.H.I.P. number.
32 USUAL RESIDENCE	Provide complete address. If rural give exact location rather than mailing address.
City	Refers to city, town or village of present residence.
Province	Refers to province of present residence.
Postal Code	Ensure all spaces completed.

APPENDIX B

PRE-TEST PLAN

APPENDIX B

HEALTH RECORD KEEPING METHODOLOGY PHASE II - QUESTIONNAIRE AND DOCUMENTATION:

PRE-TEST PLAN

1. Questionnaire Form and Notes for Completion

2. Computer Coding of Information Collected

Methodology

1. Pre-test 1: Development and Discussions (for confirmation of data required and reactions to wording)

   (i) - Own Group

   (ii) - Expert Groups: i) Statistics Canada, Questionnaire Design Resource Centre, Census and Household Surveys Methods Division: Allen Gower, Ida Trachtenburg.

   ii) Statistics Canada, Special Surveys: Scott Murray, Mike Sheriden

2. Pre-Test II: Technical Pilot: Discussions and Past Experiences (for question definitions, flow and understanding, interpretation)

   i) - Experts: Statistics Canada: Allen Gower, Head, Questionnaire Design Resource Centre

   ii) - Experienced Field Experts:

   (a) Mary Werner, Dr. David Myers, AECL Employee Health Study, Atomic Energy of Canada Ltd., CRNL

   (b) Mary McBride, B.C. Cancer Control Agency

   (c) Dr. Pat Ashmore, H&WC. Bureau of Radiation and Medical Devices, National Dose Registry

   (d) Members of the Family History Survey group at Statistics Canada

3. Pre-Test III: Pilot Test (1-3): Form Completion and Written and Verbal Interview Debriefing (for data items, problems with questions, explanatory notes and computer coding instructions; estimate of response rate for specific items).

   (i) Local Trial: Known Contacts: Statistics Canada Health Division. Approximately 12 people, selected from different classifications, by age and sex.

   (ii) Trial AECL (CRNL): Crown Corporation, Nuclear R & D Site. Approximately 30 people, representing various classifications, by age, sex and type of employment (i.e. radiation or other employment.)

   (iii) Trial Other Private Company (Chemical): Dow Chemical, Sarnia. Approximately 30 people, representing a cross-section of employees by classification, age and sex.

4. Pre-Test IV: Pilot Test (4): Form Completion From File Searches (For data items, problems with questions, item response rate).

   File Reviews:

   (i) Alberta Government, Occup. Health and Safety:
   Mr. Brian Alleyne — Radiographers and Fertilizer Workers

   (ii) British Columbia Cancer Control Agency:
   Mr. John Spinelli — Alcan (Aluminum) Workers

   (iii) Dow Chemical of Canada:
   Dr. Ron Egedahl — Dow Chemical Workers

   (Approx. 30 cases each)

APPENDIX C

PILOT TESTS CORRESPONDENCE AND EVALUATION FORMS

• Statistics Canada C1
Vital Statistics • Health Status Section

To Each Potential Participant: 8 Sept. 1986

Dear Colleague:

HEALTH RECORD KEEPING EMPLOYEE IDENTITY SUMMARY FORM PRE-TEST

The Occupational and Environmental Health Research Unit within Statistics Canada, Health Division in conjunction with the Atomic Energy Control Board has developed a basic standard and guideline questionnaire for companies/agencies within Canada to use for maintaining records to allow for future health monitoring of their employees.

Before final printing and circulation we are conducting a series of pilot tests to further evaluate the questionnaire and accompanying documentation. The management of the Vital Statistics and Health Status Section, Health Division has kindly agreed for the participation of a small representative cross-section of employees to help in one of these tests and your name has been selected. If you agree this will involve not more than one hour of your time. We need you to:

a) complete the form which requests your individual identification (one page) with the aid of the explanatory notes provided (approximately 15 minutes) and

b) take part in a discussion immediately following to provide feedback on any difficulties or problems discovered with the form or the explanatory notes.

We emphasize this is solely to evaluate the questionnaire form developed. No action will be taken on any of the information entered on the form. The forms will be maintained at Statistics Canada in the strictest confidence and no information will be released outside Statistics Canada. The forms will be destroyed at the end of the project. Employees from the Occupational and Environmental Health Research Unit will conduct the pilot test.

The present questionnaire has taken into account experiences and suggestions of various companies and agencies presently maintaining occupational health information for their employees, including AECL, form design experts within Statistics Canada, and the needs for future long-term health follow-up.

Various health organizations within Canada, the United States and internationally, including the World Health Organization, have recently been emphasizing the importance and necessity of capturing adequate personal identification in retrievable form to allow follow-up and health monitoring of occupational and environmental effects.

In Canada maintenance of inadequate individual identifying information for current and past employees has often made it either difficult and costly, or impossible to carry out long-term studies for detection of any health risks. These studies help to

determine and ensure prevention procedures and appropriate safeguards necessary for the workplace.

Ms. Tannys Scott in the Occupational and Environmental Health Research Unit will be contacting you within the next day or two to confirm whether you agree to participate, and if so to advise you of the final date, time and place to meet.

Thank you in anticipation of your help.

Yours sincerely,

Maureen Carpenter
Research Analyst
Occupational and Environmental
Health Research Unit
Vital Statistics and
Health Status Section
Health Division

Statistics Canada Statistique Canada

Ottawa
K1A 0T6

C3

September 8, 1986

Ms. Donna Crabbe
Atomic Energy of Canada Limited
Research Company
Chalk River Nuclear Laboratories
Staffing, Benefits and Records
Chalk River, Ontario
K0J 1J0

Dear Donna:

Re: i) Pre-Test of Employee Identity Summary Form Designed For Long-Term Employee Health Studies

ii) Pre-Test of the Computer Coding Instructions

Further to previous conversations and agreement regarding the informal testing of the above newly designed form and accompanying explanatory documentation by a selected group of employees at Chalk River Nuclear Laboratories, I now enclose a draft of the type of schedule we suggest for these tests together with copies of explanatory letters to be sent to the selected participants for (i) above.

Would you let me know if you see any problems with this? Otherwise I would be pleased to receive your agreement together with any additional comments you may have.

There will be three people involved and attending from Statistics Canada: Martha Smith, Tannys Scott and myself. It would be very helpful if you and Mary Werner were also able to be present.

Yours sincerely,

Maureen Carpenter
Research Analyst
Occupational and Environmental
Health Research Unit
Vital Statistics and
Health Status Section
Health Division

Encl.

x.c. Mary Werner
D.K. Beeching

Canada

HEALTH RECORD KEEPING EMPLOYEE IDENTITY SUMMARY FORM PILOT TEST

Action

1. **CRNL:**

(i) **Arrange a Room**

To accommodate about 20 people, with tables and chairs, pens/pencils etc. for completion of the form.

(ii) **Reserve the Room**

For two periods of one hour each:
a.m., say, 8:45 - 9:45; and
p.m., say, 1:15 - 2:15
on Monday, 22 September 1986

(iii) **Select the Participants**

A cross-section of approximately 30 CRNL employee "volunteers" to complete the form and take part in a short post-completion discussion for feedback of any comments, unclear statements, or general problems with the form or accompanying explanations.

We suggest dividing the total group into two halves for a morning session and an afternoon session to aid in the discussion and feedback process. The employees selected should if possible include approximately equal representatives across classifications, age, sex and dose exposure, i.e. say,

	Total	Sex		Age				Type of Employment With	
		Male	Female	Under ~40		Over ~40		Active	Other Materials
				M	F	M	F		
Professional	8	4	4	2	2	2	2	4	4
Technical	8	4	4	2	2	2	2	4	4
Clerical	8	4	4	2	2	2	2	4	4
Hourly Rate	8	4	4	2	2	2	2	4	4
Total	32	16	16	8	8	8	8	16	16

2. **Statistics Canada**:

(i) Prepare explanatory information for participants and supply this to CRNL for distribution to the selected employees.

(ii) Supply the questionnaire forms to be completed. Supply the accompanying documentation and explanations to aid completion of the form.

(iii) Conduct the pilot test(s) at CRNL

(iv) Conduct the post-test discussion(s) at CRNL

Pre-Test of the Computer Coding Instructions for the Employee Identity Summary Form

Action:

1. **CRNL:**

   . Select 2-3 individuals (from Personnel?) who might be involved in coding the data collected on the Employee Summary Sheets ready for keying it into the computer data file, to pre-test the Computer Coding Instructions. This will involve coding dummy data prepared on Employee Identity Summary forms using the Computer Coding Instructions developed. (Approximately 30 minutes).

   Following this to take part in a discussion to provide feedback on any problems they found with the instructions. (Approximately 30 minutes).

   . Arrange the room and participants for, say, 10:30 - 11:30 a.m. on the same day, Monday, 22nd September, 1986.

2. **Statistics Canada:**

   . Provide the Computer Coding Instructions and Coding Forms to be completed.

   . Provide the dummy completed questionnaire forms for coding

   . Conduct the Computer Coding pre-test at CRNL

   . Conduct the post-test discussion at CNRL

Statistics Canada / Statistique Canada
Ottawa, Canada

K1A 0T6

C7

September 10, 1986

To Each Potential Participant:

Dear Colleague:

HEALTH RECORD KEEPING EMPLOYEE IDENTITY SUMMARY FORM PRE-TEST

The Occupational and Environmental Health Research Unit within Statistics Canada, Health Division in conjunction with the Atomic Energy Control Board has developed a basic standard and guideline questionnaire for companies/agencies within Canada to use for maintaining records to allow for future health monitoring of their employees.

Before final printing and circulation we are conducting a series of pilot tests to further evaluate the questionnaire and accompanying documentation. The management of AECL at Chalk River Nuclear Laboratories has kindly agreed for the participation of a small representative cross-section of employees to help in one of these tests and your name has been selected. If you agree this will involve not more than one hour of your time. We need you to:

a) complete the form which requests your individual identification (one page) with the aid of the explanatory notes provided (approximately 15 minutes), and

b) take part in a discussion immediately following to provide feedback on any difficulties or problems discovered with the form or the explanatory notes.

We emphasize this is solely to evaluate the questionnaire form developed. No action will be taken on any of the information entered on the form. The forms will be maintained at Statistics Canada in the strictest confidence and no information will be released outside Statistics Canada. The forms will be destroyed at the end of the project. Statistics Canada employees will conduct the pilot test at CRNL.

The present questionnaire has taken into account experiences and suggestions of various companies and agencies presently maintaining occupational health information for their employees, including AECL, form design experts within Statistics Canada, and the needs for future long-term health follow-up.

Various health organizations within Canada, the United States and internationally, including the World Health Organization, have recently been emphasizing the importance and necessity of capturing adequate personal identification in retrievable form to allow follow-up and health monitoring of occupational and environmental effects.

In Canada maintenance of inadequate individual identifying information for current and past employees has often made it either difficult and costly, or impossible to carry out long-term studies for detection of any health risks. These studies help to determine and ensure prevention procedures and appropriate safeguards necessary for the workplace.

Ms. Donna Crabbe in Staffing, Benefits and Records will be contacting you within the next day or two to confirm whether you agree to participate, and if so to advise you of the final date, time and place to meet.

Thank you in anticipation of your help.

Yours sincerely,

Maureen Carpenter

Maureen Carpenter
Research Analyst
Occupational and Environmental
Health Research Unit
Vital Statistics and
Health Status Section
Health Division

PILOT TEST: AECL:CRNL

1. Reason for developing the questionnaire

2. Reason for the pilot test

3. Format of the Session

   A. Completion of the questionnaire form

   B. Answer a few general written questions giving feedback on the form

   C. Review of the questionnaire items in order for verbal feedback

   D. Any other comments

      i) Verbal: See any of the organisers

      ii) Written: Write specific comments or suggestions on the questionnaire itself (front or back), or on a separate sheet provided.

PILOT TEST:

Dow Chemical Canada

1. Reason for developing the questionnaire

2. Reason for the pilot test

3. Format of the Session

   A. Completion of the questionnaire form

   B. Answer a few general written questions giving feedback on the form

   C. Review of the questionnaire items in order, for verbal feedback

   D. Any other comments

      i) Verbal: See any of the organisers

      ii) Written: Write specific comments or suggestions on the questionnaire itself (front or back), or on a separate sheet provided.

GENERAL QUESTIONS ON IDENTITY SUMMARY FORM AND FORM COMPLETION INSTRUCTIONS

1. Is the reason for/purpose of the questionnaire clear? If not can you suggest additional clarification.

2. Are the confidentiality aspects and explanations sufficient and clear? i.e. Are you adequately informed and happy with the statements made on the confidentiality of the data? If not do you have any further suggestions?

3. Without looking at the questionnaire, were there any questions which you remember as having bothered, angered or annoyed you? If so, which ones, and if possible why?

4. Are the format and general layout and printing of the form and the explanatory notes clear? Comments:

5. Did you find the length of the questionnaire too fatiguing?

   Comments:

   _____

   _____

6. Look at the questionnaire and note below any questions for which you think the information may not be very accurate or precise.

   _____

   _____

   _____

7. Which questions did you have most trouble answering?

   _____

   _____

8. Which questions would you have to refer to records/information sources other than those you normally carry with you?

   _____

   _____

9. Would you need to take the form away with you overnight or longer to complete certain items. If so which items?

   _____

   _____

10. What was your reaction to the process of requesting you to participate in this pilot test? Was the explanation letter followed by a telephone call satisfactory?

    Yes _____: No _____:

    Comments:

    _____

    _____

    _____

GENERAL QUESTIONS ON

COMPUTER CODING INSTRUCTIONS FOR THE IDENTITY QUESTIONNAIRE

1. Is the format, general layout and printing of the questionnaire form itself clear to follow?

   Comments: .....

   .....

   .....

2. Is the format, layout and printing of the explanatory notes for computer coding clear?

   .....

   Do you have any suggestions for improvements?

   .....

   .....

   .....

3. Which items did you have the most trouble coding?

   .....

   .....

   .....

4. Did you have any problems with the wording or instructions in the coding instructions?
   If so, for which items?

   .....

   .....

   Do you have any suggestions for improvement?

   .....

   .....

   .....

5. Did you find the 'Data Type' or 'Recommended Minimum Lengths' a problem?
   If so, for which items?

Statistics Canada / Statistique Canada
Ottawa Canada

C15

K1A OT6

March 31, 1987

Mr. Bryan Alleyne
Medical Services Branch
Occupational Health & Safety Division
4th Floor, Donsdale Place
10709 Jasper Terrance
Edmonton, Alberta
T5J 3N3

Dear Mr. Alleyne:

HEALTH RECORD KEEPING EMPLOYEE IDENTIFY SUMMARY FORM PRE-TEST

The Occupational and Environmental Health Research Unit within Statistics Canada, Health Division in conjunction with the Atomic Energy Control Board has developed a basic standard and guideline questionnaire for companies/agencies within Canada to use for maintaining records to allow for future health monitoring of their employees.

As previously discussed before final printing and circulation we are conducting a series of pilot tests to further evaluate the questionnaire and accompanying documentation. We are very pleased that you are able to co-operate in undertaking a test from an employee file review. If possible we suggest a total of 30-40 files to include a representative cross-section of different types of employees e.g. past-present; older-younger; female-male; varying job classifications. We need you to:

a) complete the form which requests the individual identification (one page) plus work history and present known vital status (second page), with the aid of the explanatory notes provided (approximately 15 minutes),

b) provide feedback on any difficulties or problems, unclear questions or instructions discovered with the form or the explanatory notes, and any suggestions for improvement.

c) complete the coding sheet for each case as an example of entering the data into a company computer file, using the coding advice in the enclosed data dictionary booklet.

Canada

d) provide feedback on any difficulties or unclear instructions in the coding booklet and any suggestions for improvement.

We emphasize this is solely to evaluate the questionnaire form and documentation developed. No action will be taken on any of the information entered on the form. The forms will be maintained at Statistics Canada in the strictest confidence and no information will be released outside Statistics Canada. The forms will be destroyed at the end of the project. Last names can be changed to ensure confidentiality if this is considered necessary.

The present questionnaire has taken into account experiences and suggestions of various companies and agencies presently maintaining occupational health information for their employees, form design experts within Statistics Canada, and the needs for future long-term health follow-up.

Various health organizations within Canada, the United States and internationally, including the World Health Organization, have recently been emphasizing the importance and necessity of capturing adequate personal identification in retrievable form to allow follow-up and health monitoring of occupational and environmental effects. In Canada maintenance of inadequate individual identifying information for current and past employees has often made it either difficult and costly, or impossible to carry out long-term studies for detection of any health risks. These studies help to determine and ensure prevention procedures and appropriate safeguards necessary for the workplace.

We would appreciate it if you could undertake the trial as soon as possible. It would be helpful if the copies of the completed forms and your feedback and comments could be returned by the middle of April. Please contact me at (613) 991-1760 if you have any other questions.

Thank you in anticipation of your help.

Sincerely yours,

Maureen Carpenter

Maureen Carpenter
Research Analyst
Occupational and Environmental Health
Research Unit
Vital Statistics and
Health Status Section

Statistics Canada / Statistique Canada
Ottawa Canada
K1A OT6

March 31, 1987

Mr. John Spinelli
Cancer Control Agency of B.C.
600 West 10th Avenue
Vancouver, British Columbia
V5Z 4E6

Dear Mr. Spinelli:

HEALTH RECORD KEEPING EMPLOYEE IDENTIFY SUMMARY FORM PRE-TEST

The Occupational and Environmental Health Research Unit within Statistics Canada, Health Division in conjunction with the Atomic Energy Control Board has developed a basic standard and guideline questionnaire for companies/agencies within Canada to use for maintaining records to allow for future health monitoring of their employees.

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a) complete the form which requests the individual identification (one page) plus work history and present known vital status (second page), with the aid of the explanatory notes provided (approximately 15 minutes),

b) provide feedback on any difficulties or problems, unclear questions or instructions discovered with the form or the explanatory notes, and any suggestions for improvement.

c) complete the coding sheet for each case as an example of entering the data into a company computer file, using the coding advice in the enclosed data dictionary booklet.

Canada

d) provide feedback on any difficulties or unclear instructions in the coding booklet and any suggestions for improvement.

We emphasize this is solely to evaluate the questionnaire form and documentation developed. No action will be taken on any of the information entered on the form. The forms will be maintained at Statistics Canada in the strictest confidence and no information will be released outside Statistics Canada. The forms will be destroyed at the end of the project. Last names can be changed to ensure confidentiality if this is considered necessary.

The present questionnaire has taken into account experiences and suggestions of various companies and agencies presently maintaining occupational health information for their employees, form design experts within Statistics Canada, and the needs for future long-term health follow-up.

Various health organizations within Canada, the United States and internationally, including the World Health Organization, have recently been emphasizing the importance and necessity of capturing adequate personal identification in retrievable form to allow follow-up and health monitoring of occupational and environmental effects. In Canada maintenance of inadequate individual identifying information for current and past employees has often made it either difficult and costly, or impossible to carry out long-term studies for detection of any health risks. These studies help to determine and ensure prevention procedures and appropriate safeguards necessary for the workplace.

We would appreciate it if you could undertake the trial as soon as possible. It would be helpful if the copies of the completed forms and your feedback and comments could be returned by the middle of April. Please contact me at (613) 991-1760 if you have any other questions.

Thank you in anticipation of your help.

Sincerely yours,

Maureen Carpenter

Maureen Carpenter
Research Analyst
Occupational and Environmental Health
Research Unit
Vital Statistics and
Health Status Section
Health Division.

PILOT TEST: FILE REVIEW

GENERAL QUESTIONS ON IDENTITY SUMMARY FORM

AND FORM COMPLETION INSTRUCTIONS

1. Is the reason for/purpose of the questionnaire clear? If not can you suggest additional clarification.

_____

_____

_____

2 Are the confidentiality aspects and explanations sufficient and clear? i.e. Are you adequately informed and happy with the statements made on the confidentiality of the data: If not do you have any further suggestions?

_____

_____

_____

3. Were there an questions which bothered, angered or annoyed you, or you felt were particularly sensitive? If so, which ones, and if possible why?

_____

_____

_____

4. Are the format, general layout and printing of the form and the explanatory notes clear to follow?

_____

_____

_____

5. Did you find the length of the questionnaire too fatiguing?

6. Look at the questionnaire and note below any questions for which you think the information given may not be very accurate or precise.

7. Which questions did you have most trouble answering? Why?

8. Which questions would you have to refer to records/information sources other than the employee health or personal file?

9. Were there any problems in understanding any of the questions? If so which ones?

PILOT TEST: FILE REVIEW

GENERAL QUESTIONS ON

COMPUTER CODING INSTRUCTIONS FOR THE IDENTITY QUESTIONNAIRE

1. Is the format, layout and printing of the explanatory notes for the computer coding clear? i.e. The Data Dictionary Booklet Format.

   _____

   Do you have any suggestions for improvements?

   _____

   _____

   _____

2. Which items did you have the most trouble coding - and Why?

   _____

   _____

   _____

3. Did you have any problems with the wording or instructions in the coding instructions?
   If so, for which items?

   _____

   _____

   Do you have any suggestions for improvements?

   _____

   _____

   _____

4. Did you find the `Data Type' or `Suggested Minimum Field Lengths' a problem?
If so for which items?

_____

_____

_____

APPENDIX D

DATA COLLECTION PACKAGE

THE FULL DATA COLLECTION PACKAGE IS AVAILABLE AS A SEPARATE REQUEST

INDIVIDUAL IDENTITY SUMMARY

1. THE FIRST PAGE IS FOR COMPLETION BY THE EMPLOYEE/INDIVIDUAL THEMSELVES TO GIVE UNIQUE IDENTIFYING INFORMATION.

   IT IS DESIGNED FOR COMPLETION:
   - A) BY NEW EMPLOYEES JOINING A COMPANY
   - B) BY PRESENT/CURRENT EMPLOYEES IF A NEW DATA BASE (OR SPECIFIC STUDY) IS BEING SET UP
   - C) BY COMPANY STAFF FROM A FILE REVIEW OF PAST EMPLOYEE FILES
   - D) BY RESEARCHERS/STUDY ORGANIZERS (EPIDEMIOLOGISTS) WHEN SETTING UP A STUDY TO FOLLOW-UP A CERTAIN COHORT/GROUP WITH A SPECIAL DISEASE OR EXPOSURE
   - E) BY RESEARCHERS COLLECTING INFORMATION FOR EMERGENCY FOLLOW UP OF ACCIDENTAL EXPOSURES
   - F) BY PERSONS COLLECTING IDENTIFYING INFORMATION FOR HEALTH, DISEASE, DEMOGRAPHIC OR OTHER FOLLOW-UP.

   IT IS SUGGESTED THAT THE HEADINGS 'ORGANIZATION' AND 'WORKSITE' ON THE FIRST PAGE BE DECIDED ON AND PRE-PRINTED AHEAD OF PASSING THE FORM TO THE INDIVIDUAL TO COMPLETE.

   THE "OFFICE USE ONLY" SECTION CAN BE USED FOR ENTERING CODES READY FOR DATA CAPTURE INTO A MASTER COMPUTER FILE.

   THE REVERSE SIDE HAS EXPLANATORY NOTES TO CLARIFY SOME COMMON QUESTIONS.

2. THE SECOND PAGE IS FOR THE EMPLOYER OR STUDY ORGANIZER TO INCLUDE ADDITIONAL INFORMATION IMPORTANT WHEN UNDERTAKING A FILE REVIEW TO EXTRACT INFORMATION ON PAST EMPLOYEES, OR FOR OTHER TYPES OF STUDY GROUPS.

3. THE THIRD PAGE IS ENCLOSED FOR COLLECTION OF INFORMATION ON CHILDREN IF IT IS DECIDED TO INCLUDE THESE ON THE HEALTH RECORD FILE.

4. THE QUESTIONNAIRE CAN BE SET UP ON YOUR OWN COMPANY LETTER-HEAD.

INDIVIDUAL IDENTITY SUMMARY

CONFIDENTIAL WHEN COMPLETED

ORGANIZATION _____ DATE COMPLETED: |_|_|_|_| Year _____ Month(Spell) |_|_| Day

WORKSITE/GROUP IDENTIFIER _____

See Notes Overleaf. Enter 'NOT APPLICABLE' Where Appropriate.	PLEASE PRINT	OFFICE USE ONLY
1) EMPLOYEE OR CASE NUMBER - - - - ->	_____	.....
2) SURNAME (Last Name) - - - - - - ->	_____	.....
3) MAIDEN SURNAME (Women Only) - - ->	_____	.....
4) OTHER SURNAME(S) EVER USED- - - ->	_____	.....
5) FIRST GIVEN NAME (In Full)- - - ->	_____	.....
6) SECOND GIVEN NAME (In Full) - - ->	_____	.....
7) THIRD GIVEN NAME (In Full)- - - ->	_____	.....
8) USUAL NAME OR NICKNAME - - - - -> (IF DIFFERENT FROM 5 ABOVE)	_____ TITLE:_____	.....
9) SEX - - - - - - - - - - - - - - ->	|_| Male |_| Female	.....
10) MARITAL STATUS (Present)- - - - ->	|_|Single (Never Married) |_|Married/ Common-law |_|Widowed |_|Divorced |_|Separated	.....
11) BIRTH DATE - - - - - - - - - - ->	|_|_|_|_| Year _____ Month (Spell) |_|_| Day	.....
12) BIRTH PLACE - - - - - - - - - ->	City/Town _____ Prov_____ (or Country if not Canada)	.....
13) FATHER'S BIRTH SURNAME- - - - ->	_____	.....
14) FATHER'S FIRST NAME (In Full) - ->	_____	.....
15) FATHER'S SECOND NAME (In Full)- ->	_____	.....
16) FATHER'S BIRTH PLACE - - - - - ->	City/Town_____ Prov_____ (or Country if not Canada)	.....
17) FATHER'S BIRTH DATE: |_| Estimated	|_|_|_|_| Year _____ Month(Spell) |_|_| Day	.....
18) MOTHER'S MAIDEN SURNAME - - - - ->	_____	.....
19) MOTHER'S FIRST NAME (In Full) - ->	_____	.....
20) MOTHER'S SECOND NAME (In Full)- ->	_____	.....
21) MOTHER'S BIRTH PLACE - - - - - ->	City/Town_____ Prov_____ (or Country if not Canada)	.....
22) MOTHER'S BIRTH DATE: |_| Estimated	|_|_|_|_| Year _____ Month(Spell) |_|_| Day	.....
23) SPOUSE'S BIRTH SURNAME - - - - ->	_____	.....
24) SPOUSE'S FIRST NAME (In Full) - ->	_____	.....
25) SPOUSE'S SECOND NAME (In Full)- ->	_____	.....
26) SPOUSE'S BIRTH PLACE - - - - - ->	City/Town_____ Prov_____ (or Country if not Canada)	.....
27) SPOUSE'S BIRTH DATE: |_| Estimated	|_|_|_|_| Year _____ Month(Spell) |_|_| Day	.....
28) MARRIAGE - - - - - - - - - - - ->	Prov_____ (or Country if not Canada)	.....
29) MARRIAGE DATE:	|_|_|_|_| Year _____ Month(Spell) |_|_| Day	.....
30) SOCIAL INSURANCE NUMBER - - - - ->	|_|_|_| |_|_|_| |_|_|_|	.....
31) PROV. HEALTH INSURANCE NUMBER - ->	Prov_____ Number_____	.....
32) PERMANENT HOME ADDRESS - - - - ->	_____ No. and Street Apt. No.	.....
	_____ City/Town/Village/Place Prov/Country |_|_|_| |_|_|_| Postal Code	.....

INDIVIDUAL IDENTITY SUMMARY
FORM COMPLETION NOTES

DATA ELEMENT	FORM COMPLETION INSTRUCTIONS
1 EMPLOYEE/CASE NUMBER ...	If no employee number, enter not known or not applicable.
4 OTHER SURNAME	Refers to last names ever used including other married surname, alternate spelling of surname, legal changes, alliases etc.
5-7 GIVEN NAMES	Spell out full given names as entered on legal documents (eg. birth certificate) even if a nickname or short form of name is normally used. See (8) below. Omit any baptismal names such as Joseph or Mary.
8 NICKNAME	Refers to any names that are frequently used if different from first given name. May be nickname, short form of given name, second given name, or anglicized short form of a given European or Oriental name.
TITLE	Refers to a title or suffix associated with a surname.
12 BIRTH PLACE	Refers to city, town or village with appropriate province or country of birth if born outside Canada. If rural or farm birth, enter nearest village or town as shown or birth certificate
13-22 PARENTAL INFORMATION:	
13 & 18 SURNAMES	Refers to last name at birth or adoption even if deceased.
14-15 GIVEN NAMES 19-20	Spell out in full as entered on legal documents even if a nickname or short form of name is normally used.
16 & 21 BIRTH PLACE	
City	Refers to city, town or village of birth. See (12) above. If exact place not known, enter nearest town.
Prov/Country	Refers to specific province if born in Canada or to specific country if born outside Canada.
17 & 22 BIRTH DATE	Enter the year, including the century. Spell out the month to avoid confusion with the day. If not known exactly, enter closest estimate, and mark estimated.
23-28 SPOUSAL INFORMATION:	Include partner by marriage or common-law. Refers to present spouse, or last spouse if widowed, divorced or separated.
23 SPOUSE'S BIRTH SURNAME	Refers to last name at birth or adoption for present or last spouse, or common-law partner.
28 MARRIAGE PROVINCE	Refers to place of marriage for present or last marriage. i.e. province or country if outside Canada.
29 MARRIAGE DATE	Refers to present or last marriage.
31 PROVINCIAL HEALTH INSURANCE NO.	
Province	Refers to the Province of your Health Insurance plan.
Number	Refers to the policy number of the health plan used in your province. eg: in Ontario record O.H.I.P. number.
32 PERMANENT HOME ADDRESS	Provide complete address. If rural, give exact location rather than mailing address of post office or rural route: i.e. give section, township, range and meridian, or lot and concession.

INDIVIDUAL IDENTITY SUMMARY

THIS PAGE IS TO BE COMPLETED BY EMPLOYER/STUDY ORGANIZER

WORKSITE/GROUP IDENTIFIER _____ SURNAME _____

EMPLOYEE OR CASE NUMBER _____ GIVEN NAMES _____

33) PENSION PLAN NUMBER - - - - - -> _____

WORK HISTORY:

34) FIRST HIRE DATE - - - - - - - -> |__|__| Year _____ Month |__|__| Day 35) TERMINATION DATE -> |__|__| Year _____ Month |__|__| Day

REHIRE DATE - - - - - - - - - - -> |__|__| Year _____ Month |__|__| Day TERMINATION DATE -> |__|__| Year _____ Month |__|__| Day

REHIRE DATE - - - - - - - - - - -> |__|__| Year _____ Month |__|__| Day TERMINATION DATE -> |__|__| Year _____ Month |__|__| Day

CONTINUE ON SEPARATE PAGE IF NECESSARY

36) VITAL STATUS - - - - - - - - -> |_| Known Alive |_| Known Dead |_| Status Unknown

37) SOURCE OF INFORMATION - - - - -> |_| Pension Records |_| Current Files |_| Vital Statistics

|_| Personal Contact |_| Other Source _____

38) LAST KNOWN YEAR ALIVE - - - - -> |__|__|__|__| Year

39) LAST KNOWN ADDRESS - - - - - -> (IF DIFFERENT FROM 32 ON PREVIOUS PAGE)

_____ No. and Street Apt. No.

_____ City/Town/Village/Place Prov/Country |__|__|__| |__|__|__| Postal Code

40) DATE OF DEATH - - - - - - - - -> |__|__|__|__| Year _____ Month (Spell) |__|__| Day

41) PLACE OF DEATH - - - - - - - -> City/Town_____ Prov _____ (or Country if not Canada)

42) CAUSE(S) OF DEATH - - - - - - -> 1. If Official Documentation or Death Certificate Held:

DEATH CERTIFICATE NUMBER _____

a)Immediate Cause: _____

b)Antecedent Causes Stating Underlying Cause Last: _____

_____

c)Other Significant Contributing Conditions:

_____

_____

2. If No Official Documentation Held:

Other Known Information: _____

_____

INDIVIDUAL IDENTITY SUMMARY

WORKSITE/GROUP IDENTIFIER _____ SURNAME _____

EMPLOYEE OR CASE NUMBER _____ GIVEN NAMES _____

LIST ALL CHILDREN RELATED BY BLOOD, MARRIAGE OR COMMON LAW

43) FIRST CHILD'S SURNAME - - - - - -> _____ 44) SURNAME AT BIRTH _____ (If Different)

45) FIRST CHILD'S FIRST NAME - - - -> _____

46) FIRST CHILD'S SECOND NAME - - - -> _____

47) FIRST CHILD'S SEX - - - - - - - -> |__| Male |__| Female

48) FIRST CHILD'S BIRTH DATE - - - -> |_|_|_|_| Year _____ Month (Spell) |_|_| Day

49) FIRST CHILD'S BIRTH PLACE - - - -> _____ City/Town/Village/Place PROV: _____ (Or Country If Not Canada)

50) FIRST CHILD'S PARENTS - - - - - -> (As Named On Child's Birth or Adoption Certificate) |__| Self and Spouse As Noted On First Page |__| Self Only As Noted On First Page |__| Spouse Only As Noted On First Page |__| Other

51) FIRST CHILD'S RELATIONSHIP TO YOU: |__| Blood Related |__| Not Blood Related

52) SECOND CHILD'S SURNAME - - - - -> _____ 53) SURNAME AT BIRTH _____ (If Different)

54) SECOND CHILD'S FIRST NAME - - - -> _____

55) SECOND CHILD'S SECOND NAME - - -> _____

56) SECOND CHILD'S SEX - - - - - - -> |__| Male |__| Female

57) SECOND CHILD'S BIRTH DATE - - - -> |_|_|_|_| Year _____ Month (Spell) |_|_| Day

58) SECOND CHILD'S BIRTH PLACE - - -> _____ City/Town/Village/Place PROV: _____ (Or Country If Not Canada)

59) SECOND CHILD'S PARENTS - - - - -> (As Named On Child's Birth or Adoption Certificate) |__| Self and Spouse As Noted On First Page |__| Self Only As Noted On First Page |__| Spouse Only As Noted On First Page |__| Other

60) SECOND CHILD'S RELATIONSHIP TO YOU: |__| Blood Related |__| Not Blood Related

61) THIRD CHILD'S SURNAME - - - - - -> _____ 62) SURNAME AT BIRTH _____ (If Different)

63) THIRD CHILD'S FIRST NAME - - - -> _____

64) THIRD CHILD'S SECOND NAME - - - -> _____

65) THIRD CHILD'S SEX - - - - - - - -> |__| Male |__| Female

66) THIRD CHILD'S BIRTH DATE - - - -> |_|_|_|_| Year _____ Month (Spell) |_|_| Day

67) THIRD CHILD'S BIRTH PLACE - - - -> _____ City/Town/Village/Place PROV: _____ (Or Country If Not Canada)

68) THIRD CHILD'S PARENTS - - - - - -> (As Named On Child's Birth or Adoption Certificate) |__| Self and Spouse As Noted On First Page |__| Self Only As Noted On First Page |__| Spouse Only As Noted On First Page |__| Other

69) THIRD CHILD'S RELATIONSHIP TO YOU: |__| Blood Related |__| Not Blood Related

INDIVIDUAL IDENTITY SUMMARY

WORKSITE/GROUP IDENTIFIER _____ SURNAME _____

EMPLOYEE OR CASE NUMBER _____ GIVEN NAMES _____

LIST ALL CHILDREN RELATED BY BLOOD, MARRIAGE OR COMMON LAW

70) FOURTH CHILD'S SURNAME - - - - -> _____ 71) SURNAME AT BIRTH (If Different) _____

72) FOURTH CHILD'S FIRST NAME - - - -> _____

73) FOURTH CHILD'S SECOND NAME - - -> _____

74) FOURTH CHILD'S SEX - - - - - - - -> |_| Male |_| Female

75) FOURTH CHILD'S BIRTH DATE - - - -> |_|_|_|_| Year _____ Month (Spell) |_|_| Day

76) FOURTH CHILD'S BIRTH PLACE - - -> _____ City/Town/Village/Place PROV: _____ (Or Country If Not Canada)

77) FOURTH CHILD'S PARENTS - - - - - -> (As Named On Child's Birth or Adoption Certificate) |_| Self and Spouse As Noted On First Page |_| Self Only As Noted On First Page |_| Spouse Only As Noted On First Page |_| Other

78) FOURTH CHILD'S RELATIONSHIP TO YOU: |_| Blood Related |_| Not Blood Related

79) FIFTH CHILD'S SURNAME - - - - - -> _____ 80) SURNAME AT BIRTH (If Different) _____

81) FIFTH CHILD'S FIRST NAME - - - -> _____

82) FIFTH CHILD'S SECOND NAME - - -> _____

83) FIFTH CHILD'S SEX - - - - - - - -> |_| Male |_| Female

84) FIFTH CHILD'S BIRTH DATE - - - -> |_|_|_|_| Year _____ Month (Spell) |_|_| Day

85) FIFTH CHILD'S BIRTH PLACE - - -> _____ City/Town/Village/Place PROV: _____ (Or Country If Not Canada)

86) FIFTH CHILD'S PARENTS - - - - - -> (As Named On Child's Birth or Adoption Certificate) |_| Self and Spouse As Noted On First Page |_| Self Only As Noted On First Page |_| Spouse Only As Noted On First Page |_| Other

87) FIFTH CHILD'S RELATIONSHIP TO YOU: |_| Blood Related |_| Not Blood Related

88) SIXTH CHILD'S SURNAME - - - - - -> _____ 89) SURNAME AT BIRTH (If Different) _____

90) SIXTH CHILD'S FIRST NAME - - - -> _____

91) SIXTH CHILD'S SECOND NAME - - -> _____

92) SIXTH CHILD'S SEX - - - - - - - -> |_| Male |_| Female

93) SIXTH CHILD'S BIRTH DATE - - - -> |_|_|_|_| Year _____ Month (Spell) |_|_| Day

94) SIXTH CHILD'S BIRTH PLACE - - -> _____ City/Town/Village/Place PROV: _____ (Or Country If Not Canada)

95) SIXTH CHILD'S PARENTS - - - - - -> (As Named On Child's Birth or Adoption Certificate) |_| Self and Spouse As Noted On First Page |_| Self Only As Noted On First Page |_| Spouse Only As Noted On First Page |_| Other

96) SIXTH CHILD'S RELATIONSHIP TO YOU: |_| Blood Related |_| Not Blood Related

*FOR ADDITIONAL CHILDREN CONTINUE LISTING AFTER ITEM 96.

APPENDIX E

SOURCES FOR MARKETING AND PROMOTION

The Data Collection Package

Promotion and Dissemination Recommendations :

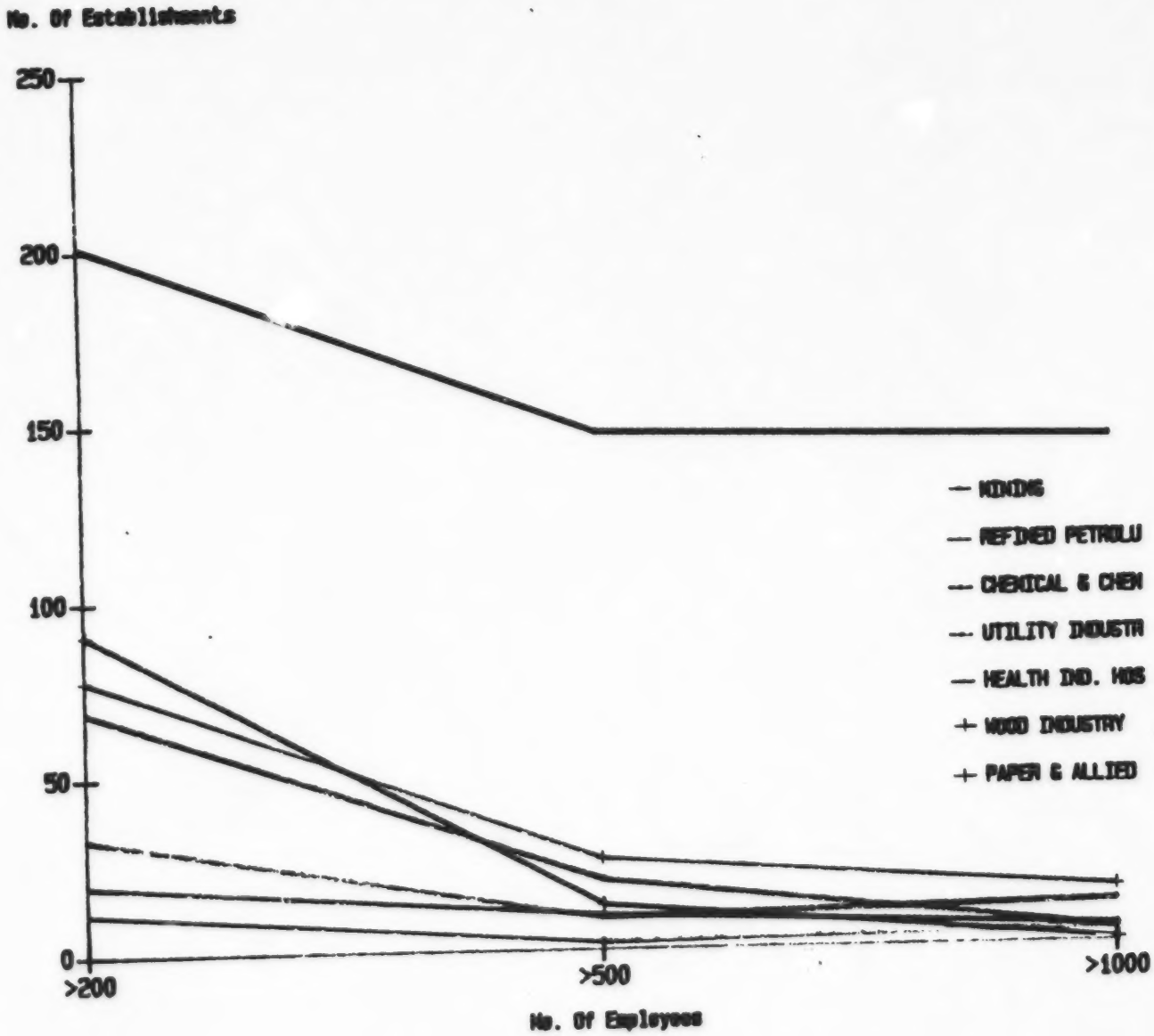
1. O.E.H.R.U. Brochure
2. Journals
   Association Newsletters
3. Conferences
4. Epidemiologists : Provincial
   Universities
   Industry
5. Provinces : Ministries of Labour
   Ministries of Health
   W.C.B.'s
   Vital Statistics Registrars
   Cancer Registry Directors
6. Associations – Industries
   – Labour Unions
   – Occupational Health Physicians
   – Occupational Health Nurses
7. Large Companies
8. National Dose Register Organizations
9. International Bodies : W.H.O.
   I.L.O.

EMPLOYMENT SIZE

TYPE	>200-499	>500-999	>1000	TOTAL
MINING	19	9	4	32
REFINED PETROLEUM AND COAL PRODUCTS	12	2	4	18
CHEMICAL & CHEM. PRODUCTS IND.	69	20	4	93
UTILITY IND.	33	9	12	54
HEALTH IND. HOSPITALS	201	147	144	492
WOOD IND.	90	12	-	102
PAPER AND ALLIED PRODUCT IND.	78	26	16	120
TOTAL	502	225	184	911

Source: Business Register, Statistics Canada

Major Employment Groups In Canada



JOURNALS

Accident Prevention

Accident Prevention Association
2 Bloor Street East, 31st floor
Toronto, Ont. M4W 3C2

At the Centre - Au Centre

Canadian Centre for Occupational Health and Safety
250 Main Street East
Hamilton, Ont. L8N 1H6

Bulletin

Transportation Safety Association of Ontario
Suite 602, 80 Bloor St. West
Toronto, Ont. M5S 2V1

CAIRS

Canadian Institute for Radiation Safety
CAIRS, Box 460
Elliot Lake Ont. P5A 2J9

Canadian Occupational Safety

Industrial Magazine Division of Cash Crop,
Farming Publications Ltd.
222 Argyle Avenue
Delhi, Ont. N4B 2Y2

Canadian Occupational Health and Safety News

Corpus Information Services
Southam Communications Limited
1450 Don Mills Road
Don Mills, Ont. M3B 2X7

CSSE

Canadian Society of Safety Engineering
1087 Meyerside Drive, Suite 5
Mississauga Ont. L5T 1M5

CSST

Commission de la Santé et de la
Sécurité au Travail du Québec
1199, de Bleury, 11e etage
Montréal, Qué H3C 4E1

Counsellor

Construction Safety Association of Ontario
Information Services Department
74 Victoria Street
Toronto, Ont. M5C 2A5

CUSCO Newsletter

College, Univ. and School Safety Council of Ontario,
Safety Ed. Div.
Worker's Compensation Board
80 Bloor Street West
Toronto, Ont. M5S 2V1

Farmsafe

Farm Safety Association Inc.
Unit 22, 340 Woodlawn Road West
Guelph, Ont. N1H 7K6

Health

Health League of Canada
76 Avenue Road
Toronto, Ont.

Health and Safety at Work

Worker's Health, Safety and Compensation
Occupational Health and Safety Division
5 th floor, 10709 Jasper Avenue
Edmonton, Alta. T5J 3N3

Health and Safety Digest

Worker's Compensation Board of British Columbia
5961 Westminster Hwy.
Richmond B.C. V7C 1C6

L'IRSST

Bulletin d'Information sur la
Recherche en Santé et Sécurité du Travail
Institut de Recherche en Santé et Sécurité du Travail
505 boul. de Maisonneuve Ouest
Montréal, Qué. H3A 3C2

Occupational Health in Ontario

Ontario Ministry of Labour
Occupational Health and Safety Division
400 University Ave.
Toronto, Ont. M7A 1T7

Occupational Safety and Health Bulletin

Ontario Ministry of Labour Library
400 University Ave.
Toronto, Ont. M7A 1T7

On the Safe Side

Health Care Occupational Health and Safety Association
150 Ferrand Dr.
Don Mills, Ont. M3C 1H6

La Prévention au Canada

Conseil Canadien de la Sécurité
1765 Boul. St-Laurent
Ottawa, Ont. K1G 3V4

Prévention

APPSST
1061 Saint-Alexandre
Bureau 100
Montréal, Qué. H2Z 1P5

Safe-T News

Safety Supply Canada
214 King Street East
Toronto, Ont.

Safety Canada

Canada Safety Council
1765 St-Laurent Blvd.
Ottawa, Ont. K1G 3V4

Santé Sécurité +

Bulletin Trimestriel de l'ASFETM
6020, rue Jean-Talon est
Bureau 430
Montréal, Qué. H1S 3B1

CONFERENCES/MEETINGS

1987

October, 19-23 Ottawa, Ontario. 16th Annual Ontario Occupational Health Nurses Association Conference

November, 12-13 Edmonton, Alberta. Joint Meeting Canadian Occupational Health Association and Alberta Occupational Health Society. "Current Issues in Occupational Health"

November, 23-25 Ottawa, Ontario. International Symposium on Statistical Uses of Administrative Data. Statistics Canada.

1988

May, 11-13 Montebello, Quebec. Radiation Meeting

August, 21-26 Ottawa, Ontario. EPIC '88 Epidemiologic Practices in Canada, University of Ottawa, Department of Epidemiology and Community Medicine.

September, 25-28 Quebec City, Quebec. Occupational Medical Association of Canada and the Quebec Occupational Medical Association Joint Meeting.

October, 19-21 Hamilton, Ontario. 17th Annual Ontario Occupational Health Nurses Association Conference.

November, 8-10 Ottawa, Ontario. Canadian Occupational Health Association (COHA) Conference. "Applying What We Know".

1989

May, 16-17 Ottawa, Ontario. Canadian Epidemiology and Record Linkage Conference

June Montreal, Quebec. Joint Meeting COHA and CPHA

September Halifax, Nova Scotia. Occupational Medical Association of Canada Conference

October Ontario Occupational Health Nurses Association Conference.

1990

September, 22-29 Montreal, Quebec. 23rd International Congress on Occupational Health.

PROVINCIAL EPIDEMIOLOGISTS

Dr. Faith Stratton
Chief Medical Health Officer
Department of Health
P.O. Box 4750
ST. JOHN'S, Newfoundland
A1C 5T7 1-709-576-3430

Dr. Ross Stewart
Provincial Epidemiologist
Department of Health
65 McGill Avenue
CHARLOTTETOWN, P.E.I.
C1A 2K1 1-902-894-7331

Dr. P.M. Lavigne
Provincial Epidemiologist
Department of Health
P.O. Box 488
HALIFAX, Nova Scotia
B3J 2R8 1-902-424-5547

Dr. B. Christofer Balram
Director
Public Health Services
Department of Health
P.O. Box 5100
FREDERICTON, New Brunswick
E3B 5H1 1-506-453-2216

Dr. Michel Y. Pelletier
Director, Plannification et
Promotion de la Santé
Ministère de la Santé et
des Services sociaux
1075, chemin Ste-Foy
QUEBEC, (Quebec)
G1S 2M1 1-418-643-6390

Dr. Ian Johnson, Epidemiologist
Non-Communicable Diseases
Health Promotion, etc.

Dr. J.A.K. Carlson
Physician Manger
Disease Control and
Epidemiology Service
Ontario Ministry of Health
15 Overlea Boulevard
TORONTO, Ontario
M4H 1A9 1-416-963-2238

Dr. Margaret Fast, Director
Communicable Disease Control
Department of Health and
Social Development
831 Portage Avenue, 3rd Floor
WINNIPEG, Manitoba
R3G ON6 1-416-945-6833

Dr. Roy West, Director
Division of Laboratories
Department of Public Health
Hill Avenue and Legislative
Grounds
REGINA, Saskatchewan
S4S 5W6 1-306-565-3129

Dr. John Waters, Director
Communicable Disease Control
and Epidemiology
Alberta Social Services
and Community Health
7th Street Plaza - 7th Floor
10030 - 107th Street
EDMONTON, Alberta
T5J 3E4 1-403-427-5263

Dr. R. Fisk, A/Director
Division of Epidemiology
Ministry of Health
1515 Blanshard Street
VICTORIA, British Columbia
V8W 3C8 1-604-387-2704

Territorial Epidemiologist
Government of the Northwest
Territories
YELLOWKNIFE, N.W.T.
X1A 2L9 1-403-873-7721

List of Universities

University of Western Ontario	McGill University	University of Toronto	University of Ottawa	McMaster University	Dalhousie University
Dr. Carol Buck	Dr. G.B. Hill	Dr. G.R. Howe	Dr. John Last	Dr. S.D. Walter	Dr. F. White
Dr. J. Robertson	Dr. O. Miettinen	Dr. A.B. Miller	Dr. L. Neri	Dr. R. Roberts	Dr. Lucy Wynn
	Dr. W.O. Spitzer		Dr. R. Spasoff	Dr. Don Cheng	
	Dr. J.P. Boivin		Dr. C. Dulberg	Dr. Ted Haines	
	Dr. M. Goldberg		Dr. S. Raman	Dr. David Muir	
	Dr. G. Theriault			Dr. E. Nisbour	
				Dr. Harry Shannon	

Institut. Armand-Frappier	University of B.C.
Dr. J. Semiatychi	Dr. Clyde Hertzman
Mr. R. Dewar	

GOVERNMENTS

Federal

Statistics Canada - Labour Division
Ottawa, Ontario
K1A OT6
Chief of Unemployment Insurance
Section: Horst Stiebert
613-951-9900

Occupational Health and Safety Branch
Labour Canada
Ottawa, Ontario
K1A OJ2
Director: J.W. McLellan
819-997-3520

Health and Welfare Canada
Bureau of Epidemiology
LCDC Building
Tunney's Pasture
Ottawa, Ontario
K1A OL2
Director: Dr. J.W. Davies
613-957-0331

Health and Welfare Canada
Public Service Health Directorate
Occupational Health Unit
Tunney's Pasture
Ottawa, Ontario
K1A OL3
Director: Dr. J. Kirkbride
613-957-8457

Health and Welfare Canada
Bureau of Radiation and Medical Devices
775 Brookfield Road
Ottawa, Ontario
K1A 1C1
Director: Dr. E.G. Letourneau
613-954-6647

Prince Edward Island

Occupational Health and Safety Division
(Department of Fisheries and Labour)
P.O. Box 2000
Charlottetown, P.E.I.
C1A 7N8
Director: Phyllis MacDonald
902-892-3493

Nova Scotia

Occupational Health and Safety Division
(Department of Labour)
P.O. Box 697
Halifax, N.S.
B3J 2T8
Executive Director: Jack Noonan
902-424-4328

New Brunswick

Occupational Health and Safety Commission
(Department of Labour and Human Resources)
Box 6000
Fredericton, N.B.
E3B 5H1
Chairman: Georgio Gaudet
506-453-2467

Quebec

Commission de a Santé et de la Sécurité au Travail (CSST)
(Ministry of Labour)
1199 de Bleury, C.P. 6056, Succ. A
Montréal, Québec
H3C 4E1
Chairman: Monique Jérome-Forget
514-873-3503

Ontario

Occupational Health and Safety Division
(Ministry of Labour)
400 University Avenue
Toronto, Ontario
M7A 1T7
Ass. Deputy Minister: Dr. Ann Robinson
416-965-9450
Executive Director: Brian Goodman
416-963-2608

Manitoba

Workplace Safety and Health Division
(Department of Environment and
Workplace Safety and Health)
960-330 St. Mary Avenue
Winnipeg, Manitoba
R3C 3Z5
Director: J.E. Reimer
204-945-3605
Safety and Health Inspectorate
Head: Grant McCaughey
204-945-3602

Saskatchewan

Occupational Health and Safety Branch
(Department of Labour)
Saskatchewan Place
1870 Albert Street
Regina, Saskatchewan
S4P 3V7
Director: J. Alderman
306-787-4481

Alberta

Occupational Health and Safety Division
(Ministry of Community and Occupational Health)
10709 Jasper Avenue
Edmonton, Alberta
T5J 3N3
Managing Director: Dr Herbert Buchwald
403-427-6971

British Columbia

Occupational Health and Safety Division
(Worker's Compensation Board, Department of Labour)
6951 Westminster Hwy.
Richmond, B.C.
V7C 1C6
General Manager: F.W. Greer
604-273-2266

Yukon

Occupational Health and Safety Division
(Department of Justice)
Box 2703
Whitehorse, Yukon
Y1A 2C6
Chief: Rick Rouere
403-667-5811

Northwest Terrirotire

Safety Division
(Department of Justice and Public Services)
P.O. Box 1320
Yellowknife, N.W.T.
X1A 2L9
Chief: Robbie Robinson
403-873-7619
Occupational Health and Safety Section
Head: Laurie Nowakswski

Newfoundland

Occupational Health and Safety Division
(Department of Labour)
P.O. Box 4750
St. John's, Newfoundland
A1C 5T7
Assistant Deputy Minister: Robert Langdon
709-576-2721
Occupational Health and Safety Services Branch
Director: R. Roger March
709-576-2694

LIST OF ADDRESSES FOR WORKERS COMPENSATION BOARDS

Mr. Merv Andrews
Director, Information Systems
Workers' Compensation
Commission
of Newfoundland and Labrador
P.O. Box 9000, Stn. "B"
St. John's, Newfoundland
A1A 3B8
1-709-778-1000, Ext. 144

Mrs. Chris Power
Data Processing Supervisor
The Worker's Compensation Board
- Prince Edward Island
P.O. Box 757
Charlottetown, P. E. I.
C1A 7L7
1-902-566-4420

Mr. Paul Kent
Director of M. I. S.
Workers' Compensation Board
of Nova Scotia
P.O. Box 1150
Halifax, Nova Scotia
B3J 2Y2
1-902-424-8379

Mr. Irvine Robertson
Director of Claims
The Workers' Compensation
Board (New Brunswick)
P.O. Box 160
Saint John, New Brunswick
E2L 3X9
1-506-632-2212

M. Gaston Bernard, Chef
Service de la statistique et de
l'évaluation des programmes
Chambre 333
Commission de la santé et de la
sécurité du travail du Québec
524, rue Bourdages
Québec, (Québec)
G1K 7E2
1-418-644-1074

Mr. Peter Levycky, Supervisor
Statistical Services Section
Workers' Compensation Board
of Ontario
2 Bloor Street West
Toronto, Ontario
M4W 3C3
1-416-927-4063
(Ilse Pavlik)
1-416-927-4066
(Sylvia Retolo)

Mr. Dave Greason
Director, Data Processing
The Workers Compensation
Board of Manitoba
333 Maryland Street
Winnipeg, Manitoba
R3G 1M2
1-204-786-9555

Mr. Dan Grant, Manager
Research and Information
Saskatchewan Worker's
Compensation Board
1840 Lorne Street
Regina, Saskatchewan
S4P 2L8
1-306-787-4651

Mr. George Andreoff, Supervisor
Research and Statistics
The Workers' Compensation
Board - Alberta
P.O. Box 2415
Edmonton, Alberta
T5J 2S5
1-403-427-2462

Mr. Keith Mason, Co-ordinator
Statistical Services
Workers' Compensation Board
of British Columbia
6951 Westminster Highway
Richmond, British Columbia
V7C 1C6
1-604-276-3130

Ms. Dorothy Wasylynchuk
Executive Director
Workers' Compensation Board
Gov't of the Yukon Territory
300 - 4110 Fourth Avenue
Whitehorse, Yukon Territory
Y1A 4N7
1-403-667-5645

Mr. Bill Fildes
Data Processing Officer
Workers' Compensation Board
of the Northwest Territories
P.O. Box 8888
Yellowknife, N. W. T.
X1A 2R3
1-403-920-6520
Mr. Oscar Menard
Director, Claims Services
1-403-873-7745

VITAL STATISTICS REGISTRARS

NEWFOUNDLAND
Mr. N.M. Parker,
Registrar,
Division of Vital Statistics,
Department of Health,
St. John's, Newfoundland. A1C 5T7
TEL. NO.: (709) 576-3308

PRINCE EDWARD ISLAND
Mrs. Gloria Melanson,
Director,
Division of Vital Statistics,
Department of Health,
P.O. Box 2000,
Charlottetown, P.E.I. C1A 7N8
TEL. NO.: (902) ~~892-1001~~ 368-4420

NOVA SCOTIA
Mrs. Betty Etter,
Deputy Registrar General,
1723 Hollis Street,
P.O. Box 157,
Halifax, Nova Scotia. B3J 2M9
TEL. NO.: (902) 424-4373

NEW-BRUNSWICK
Ms. Marianne Wiezel,
Registrar General,
Department of Health,
Centennial Building,
P.O. Box 6000,
Fredericton, New Brunswick. E3B 5H1
TEL. NO.: (506) 453-2387

QUÉBEC
M. Lorenzo Servant,
Chef de services,
Régistre de référence à l'état civil,
Place de la justice,
300 Boul. Jean-Lesage,
R.C. 20,
Québec (Québec).
G1K 8K6
TEL. NO.: (418) 643-6436

ONTARIO
Ms. Despina Georgas,
Deputy Registrar General,
Ministry of Consumer and
Commercial Relations,
MacDonald Block Queens Park,
Room M2 - 25,
Toronto, Ontario. M7A 1Y5
TEL. NO.: (416) 965-2274

MANITOBA
Mrs. Marjorie Kreton,
Director of Vital Statistics,
Department of Community Services,
Administrative and Financial Services,
254 Portage Avenue,
Winnipeg, Manitoba. R3C 0B6
TEL. NO.: (204)945-3701

SASKATCHEWAN
Mr. Wilmer Berg,
Director of Vital Statistics,
Department of Health,
Room 123, T.C. Douglas Building,
3475 Albert Street,
Regina, Saskatchewan. S4S 6X6
TEL. NO.: (306) 565-3092

ALBERTA
Mr. William Gilroy,
Director.
Division of Vital Statistics,
Department of Community and
Occupational Health,
10130-112 Street,
Edmonton, Alberta. T5K 2K4
TEL. NO.: (403) 427-5857

BRITISH COLUMBIA
Mr. R. Danderfer,
Acting Director,
Division of Vital Statistics,
1515 Blanshard Street,
Victoria, British Columbia. V8W 1X4
TEL. NO.: (604) 386-3166 local 2402

YUKON
Mrs. Arleen Kovac
Deputy/Registrar General of Vital
Statistics,
Government of Yukon,
Box 2703,
Whitehorse, Yukon. Y1A 2C6
TEL. NO.: (403) 667-5207

NORTHWEST TERRITORIES
Mrs. Vicki Hickey,
Registrar General of Vital Statistics,
Department of Justice & Public
Services,
Government of Northwest Territories,
P.O. Box 1320,
Yellowknife, N.W.T. X1A 2L9
TEL. NO.: (403) 873-7405

Effective March, 1988

CANCER REGISTRY DIRECTORS

Newfoundland

Ms. Donna L. Ball, Director
of Data Services and
Cancer Registry
Newfoundland Cancer Treatment
& Research Foundation
25 Kenmount Road
St. John's, Newfoundland
A1B 1W1
Telephone: (709) 753-2599

Prince Edward Island

Dr. E. Dagny
Provincial Oncologist
Division of Oncology Services
Department of Health and
Social Services
Box 2000
Charlottetown, P.E.I.
C1A 7N8
Telephone: (902) 566-6027

Nova Scotia

Dr. Doug Thomson
Executive Director
Cancer Treatment and Research
Foundation of Nova Scotia
5820 University Avenue
Halifax, Nova Scotia
B3H 1V7
Telephone: (902) 428-4209

New Brunswick

Dr. Doug Smith
Director
Provincial Tumour Registry
P.O. Box 2100
Saint John Regional Hospital
Saint John, New Brunswick
E2L 4L2
Telephone: (506) 648-6884

Manitoba

Ms. Gloria Hanson
Director
Oncology Records and Registry
Manitoba Cancer Treatment and
Research Foundation
100 Olivia Street
Winnipeg, Manitoba
R3E 0V9
Telephone: (204) 787-2162

Saskatchewan

Mrs. Diane Robson
Director of Data Services
Saskatchewan Cancer Foundation
2631-28th Avenue
Regina, Saskatchewan
S4S 6X3
Telephone: (306) 585-1831

Alberta

Dr. Maria Koch
A/Director
Department of Epidemiology
and Preventive Oncology
9707-110th St., 6th Floor
Edmonton, Alberta
T5K 2L9
Telephone: (403) 482-7493

British Columbia

Mr. Peter Hayles
Director of Data Services
Cancer Control Agency of
British Columbia
600 West Tenth
Vancouver, British Columbia
V5Z 4E6
Telephone: (604) 877-6000

Québec

M. Guy-Paul Sanscartier, Chef
Services des études opérationnelles
Ministère des Affaires Sociales
1075 Chemin Ste-Foy, 3ième étage
Québec, Québec
G1S 2M1
Telephone: (418) 643-9936

Ontario

Dr. Aileen Clarke
Head
Division of Epidemiology and Statistics
The Ontario Cancer Treatment and Research Foundation
7 Overlea Blvd.
Toronto, Ontario
M4H 1A8
Telephone: (416) 423-4240

Northwest Territories

Ms. Sharon Freitag
A/Director
Cancer Registry Department of Health
Government of the Northwest Territories
Box 1320
Yellowknife, N.W.T.
Telephone: (403) 920-4218

Statistics Canada

Dr. David F. Bray
Director
Health Division
Statistics Canada
18th Floor, R.H. Coats Bldg.
Tunney's Pasture
Ottawa, Ontario
X1A 2L9
Telephone: (613) 951-8571

ATOMIC ENERGY CONTROL BOARD

H2 EPIDEMIOLOGY

Project Manager: V. Elaguppillai

Panel Members

- Dr. S. Buehler
  The General Hospital, St. John's, Newfoundland
- Dr. D.H. Thomson
  Cancer Treatment and Research Foundation
  of Nova Scotia, Halifax, Nova Scotia
- Dr. N. Kreiger
  The Ontario Cancer Treatment and Research Foundation
  Toronto, Ontario
- Ms. D. Robson
  Saskatchewan Cancer Foundation, Regina, Saskatchewan
- Dr. G. Theriault
  McGill University, Montreal, Quebec
- Ms. M. McBride
  Cancer Control Agency of B.C., Vancouver, British Columbia
- Dr. J.C. Wallace
  Saint John General Hospital, Saint John, New Brunswick
- Dr. G.B. Hill
  Alberta Cancer Board, Edmonton, Alberta
- Dr. L. Marrett
  The Ontario Cancer Treatment and Research Foundation
  Toronto, Ontario

CANADIAN OCCUPATIONAL HEALTH ASSOCIATION

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C.J. Tallon	Canadian Society of Safety Engineers (ONT.)
Gilles Theriault	School of Occupational Health, McGill University (QUE.)
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